MAR 0 5 2002 & Charles Nelson B.

## SEQUENCE LISTING

<120> METHODS OF DIAGNOSING NEUROPSYCHIATRIC DISORDERS	
<130> 07334-362001	
<140> 09/722,544 <141> 2000-11-28	
<150> 09/236,134 <151> 1999-01-22	
<150> 60/078,044 <151> 1998-03-16	
<150> 60/088,312 <151> 1998-06-05	
<150> 60/106,056 <151> 1998-10-28	
<160> 33	
<170> FastSEQ for Windows Version 3.0	
<210> 1 <211> 2055 <212> DNA <213> Homo sapiens	
<220> <221> CDS <222> (285)(1769)	
<pre>&lt;400&gt; 1 tgcgtcacct gcaggcccgg gccgcgggt tggtttccac cctggaggtt gctgacaccc tgtgccctcg gctgacttcc agccggtggc acagacgcct ccagggggca gcactcaagc gcatcttagg aatgacagag ttgcgtccct ctctgttgcc aggctggagt tcagtggcat gttcttagct cactgaagcc tcaaattcct gggttcaagt gaccctccca cctcagcccc atgaggacct gggactacag gacacagcta aatccctgac acgg atg aaa att aaa</pre>	60 120 180 240 296
gca gag aaa aac gaa ggt cct tcc aga agc tgg tgg caa ctt cac tgg Ala Glu Lys Asn Glu Gly Pro Ser Arg Ser Trp Trp Gln Leu His Trp 5 10 15 20	344
gga gat att gca aat aac agc ggg aac atg aag ccg cca ctc ttg gtg Gly Asp Ile Ala Asn Asn Ser Gly Asn Met Lys Pro Pro Leu Leu Val 25 30 35	392
ttt att gtg tgt ctg ctg tgg ttg aaa gac agt cac tgc gca ccc act Phe Ile Val Cys Leu Leu Trp Leu Lys Asp Ser His Cys Ala Pro Thr 40 45 50	440

tgg Trp	aag Lys	gac Asp 55	aaa Lys	act Thr	gct Ala	atc Ile	agt Ser 60	gaa Glu	aac Asn	ctg Leu	aag Lys	agt Ser 65	ttt Phe	tct Ser	gag Glu	488
gtg Val	ggg Gly 70	gag Glu	ata Ile	gat Asp	gca Ala	gat Asp 75	gaa Glu	gag Glu	gtg Val	aag Lys	aag Lys 80	gct Ala	ttg Leu	act Thr	ggt Gly	536
att Ile 85	aag Lys	caa Gln	atg Met	aaa Lys	atc Ile 90	atg Met	atg Met	gaa Glu	aga Arg	aaa Lys 95	gag Glu	aag Lys	gaa Glu	cac His	acc Thr 100	584
aat Asn	cta Leu	atg Met	agc Ser	acc Thr 105	ctg Leu	aag Lys	aaa Lys	tgc Cys	aga Arg 110	gaa Glu	gaa Glu	aag Lys	cag Gln	gag Glu 115	gcc Ala	632
ctg Leu	aaa Lys	ctt Leu	ctg Leu 120	aat Asn	gaa Glu	gtt Val	caa Gln	gaa Glu 125	cat His	ctg Leu	gag Glu	gaa Glu	gaa Glu 130	gaa Glu	agg Arg	680
cta Leu	tgc Cys	cgg Arg 135	gag Glu	tct Ser	ttg Leu	gca Ala	gat Asp 140	tcc Ser	tgg Trp	ggt Gly	gaa Glu	tgc Cys 145	agg Arg	tct Ser	tgc Cys	728
ctg Leu	gaa Glu 150	aat Asn	aac Asn	tgc Cys	atg Met	aga Arg 155	att Ile	tat Tyr	aca Thr	acc Thr	tgc Cys 160	caa Gln	cct Pro	agc Ser	tgg Trp	776
tcc Ser 165	tct Ser	gtg Val	aaa Lys	aat Asn	aag Lys 170	att Ile	gaa Glu	cgg Arg	ttt Phe	ttc Phe 175	agg Arg	aag Lys	ata Ile	tat Tyr	caa Gln 180	824
ttt Phe	cta Leu	ttt Phe	cct Pro	ttc Phe 185	cat His	gaa Glu	gat Asp	aat Asn	gaa Glu 190	aaa Lys	gat Asp	ctc Leu	ccc Pro	atc Ile 195	agt Ser	872
gaa Glu	aag Lys	ctc Leu	att Ile 200	gag Glu	gaa Glu	gat Asp	gca Ala	caa Gln 205	ttg Leu	acc Thr	caa Gln	atg Met	gag Glu 210	gat Asp	gtg Val	920
ttc Phe	agc Ser	cag Gln 215	ttg Leu	act Thr	gtg Val	gat Asp	gtg Val 220	aat Asn	tct Ser	ctc Leu	ttt Phe	aac Asn 225	agg Arg	agt Ser	ttt Phe	968
aac Asn	gtc Val 230	ttc Phe	aga Arg	cag Gln	atg Met	cag Gln 235	caa Gln	gag Glu	ttt Phe	gac Asp	cag Gln 240	act Thr	ttt Phe	caa Gln	tca Ser	1016
cat His 245	ttc Phe	ata Ile	tca Ser	gat Asp	aca Thr 250	gac Asp	cta Leu	act Thr	gag Glu	cct Pro 255	tac Tyr	ttt Phe	ttt Phe	cca Pro	gct Ala 260	1064
					atg Met											1112

.

att Ile	ccc Pro	aac Asn	ttc Phe 280	ttc Phe	cag Gln	ctg Leu	ttt Phe	tgt Cys 285	aat Asn	ttc Phe	agt Ser	gtc Val	tct Ser 290	att Ile	tat Tyr	1160
gaa Glu	agt Ser	gtc Val 295	agt Ser	gaa Glu	aca Thr	att Ile	act Thr 300	aag Lys	atg Met	ctg Leu	aag Lys	gca Ala 305	ata Ile	gaa Glu	gat Asp	1208
tta Leu	cca Pro 310	aaa Lys	caa Gln	gac Asp	aaa Lys	gct Ala 315	cct Pro	gac Asp	cac His	gga Gly	ggc Gly 320	ctg Leu	att Ile	tca Ser	aag Lys	1256
atg Met 325	tta Leu	cct Pro	Gly 333	cag Gln	gac Asp 330	aga Arg	gga Gly	ctg Leu	tgt Cys	335 335	gaa Glu	ctt Leu	gac Asp	cag Gln	aat Asn 340	1304
ttg Leu	tca Ser	aga Arg	tgt Cys	ttc Phe 345	aaa Lys	ttt Phe	cat His	gaa Glu	aaa Lys 350	tgc Cys	caa Gln	aaa Lys	tgt Cys	cag Gln 355	gct Ala	1352
cac His	cta Leu	tct Ser	gaa Glu 360	gac Asp	tgt Cys	cct Pro	gat Asp	gta Val 365	cct Pro	gct Ala	ctg Leu	cac His	aca Thr 370	gaa Glu	tta Leu	1400
gac Asp	gag Glu	gcg Ala 375	atc Ile	agg Arg	ttg Leu	gtc Val	aat Asn 380	gta Val	tcc Ser	aat Asn	cag Gln	cag Gln 385	tat Tyr	ggc	cag Gln	1448
att Ile	ctc Leu 390	cag Gln	atg Met	acc Thr	cgg Arg	aag Lys 395	cac His	ttg Leu	gag Glu	gac Asp	acc Thr 400	gcc Ala	tat Tyr	ctg Leu	gtg Val	1496
gag Glu 405	aag Lys	atg Met	aga Arg	ggg ggg	caa Gln 410	ttt Phe	ggc Gly	tgg Trp	gtg Val	tct Ser 415	gaa Glu	ctg Leu	gca Ala	aac Asn	cag Gln 420	1544
gcc Ala	cca Pro	gaa Glu	aca Thr	gag Glu 425	atc Ile	atc Ile	ttt Phe	aat Asn	tca Ser 430	ata Ile	cag Gln	gta Val	gtt Val	cca Pro 435	agg Arg	1592
att Ile	cat His	gaa Glu	gga Gly 440	aat Asn	att Ile	tcc Ser	aaa Lys	caa Gln 445	gat Asp	gaa Glu	aca Thr	atg Met	atg Met 450	aca Thr	gac Asp	1640
tta Leu	agc Ser	att Ile 455	ctg Leu	cct Pro	tcc Ser	tct Ser	aat Asn 460	ttc Phe	aca Thr	ctc Leu	aag Lys	atc Ile 465	cct Pro	ctt Leu	gaa Glu	1688
gaa Glu	agt Ser 470	gct Ala	gag Glu	agt Ser	tct Ser	aac Asn 475	ttc Phe	att Ile	ggc Gly	tac Tyr	gta Val 480	gtg Val	gca Ala	aaa Lys	gct Ala	1736
					gaa Glu 490						taa	gaag	atc	taat	gcatcc	1789
tat	atcc	agt .	aagt	agaa	tt a	tctc	ttca	t ct	ggga	cctg	gaa	atcc	tga	aata	aaaaag	1849

gataatgcaa taaacacagt tgcaggaaag tatgttagct atatactatg aagtactctt 1909 agtttactta tgttgaatgg cttagctatt aatactcaaa ttgagttaaa atgaaaattc ctccttaaaa aatcaaacgt aatatgtatt acatttcatg gtacattagt agttctttgt atattgaata aatactaaat caccta

1969 2029 2055

<210> 2 <211> 495 <212> PRT <213> Homo sapiens

<400>2Met Lys Ile Lys Ala Glu Lys Asn Glu Gly Pro Ser Arg Ser Trp Trp 10 Gln Leu His Trp Gly Asp Ile Ala Asn Asn Ser Gly Asn Met Lys Pro Pro Leu Leu Val Phe Ile Val Cys Leu Leu Trp Leu Lys Asp Ser His 40 Cys Ala Pro Thr Trp Lys Asp Lys Thr Ala Ile Ser Glu Asn Leu Lys 55 Ser Phe Ser Glu Val Gly Glu Ile Asp Ala Asp Glu Glu Val Lys 70 75 Ala Leu Thr Gly Ile Lys Gln Met Lys Ile Met Met Glu Arg Lys Glu 90 85 Lys Glu His Thr Asn Leu Met Ser Thr Leu Lys Lys Cys Arg Glu Glu 105 100 Lys Gln Glu Ala Leu Lys Leu Leu Asn Glu Val Gln Glu His Leu Glu 120 Glu Glu Glu Arg Leu Cys Arg Glu Ser Leu Ala Asp Ser Trp Gly Glu 140 135 Cys Arg Ser Cys Leu Glu Asn Asn Cys Met Arg Ile Tyr Thr Thr Cys 150 155 Gln Pro Ser Trp Ser Ser Val Lys Asn Lys Ile Glu Arg Phe Phe Arg 165 170 Lys Ile Tyr Gln Phe Leu Phe Pro Phe His Glu Asp Asn Glu Lys Asp 180 185 Leu Pro Ile Ser Glu Lys Leu Ile Glu Glu Asp Ala Gln Leu Thr Gln 205 200 Met Glu Asp Val Phe Ser Gln Leu Thr Val Asp Val Asn Ser Leu Phe 220 215 Asn Arg Ser Phe Asn Val Phe Arg Gln Met Gln Glu Phe Asp Gln 235 230 Thr Phe Gln Ser His Phe Ile Ser Asp Thr Asp Leu Thr Glu Pro Tyr 250 245 Phe Phe Pro Ala Phe Ser Lys Glu Pro Met Thr Lys Ala Asp Leu Glu 270 265 Gln Cys Trp Asp Ile Pro Asn Phe Phe Gln Leu Phe Cys Asn Phe Ser 285 280 275 Val Ser Ile Tyr Glu Ser Val Ser Glu Thr Ile Thr Lys Met Leu Lys 295 300 Ala Ile Glu Asp Leu Pro Lys Gln Asp Lys Ala Pro Asp His Gly Gly 315 310 Leu Ile Ser Lys Met Leu Pro Gly Gln Asp Arg Gly Leu Cys Gly Glu

330

365

Leu Asp Gln Asn Leu Ser Arg Cys Phe Lys Phe His Glu Lys Cys Gln 345 Lys Cys Gln Ala His Leu Ser Glu Asp Cys Pro Asp Val Pro Ala Leu 360

325

355

His Thr Glu Leu Asp Glu Ala Ile Arg Leu Val Asn Val Ser Asn Gln 380 375 370 Gln Tyr Gly Gln Ile Leu Gln Met Thr Arg Lys His Leu Glu Asp Thr 395 390 Ala Tyr Leu Val Glu Lys Met Arg Gly Gln Phe Gly Trp Val Ser Glu 410 Leu Ala Asn Gln Ala Pro Glu Thr Glu Ile Ile Phe Asn Ser Ile Gln 430 425 Val Val Pro Arg Ile His Glu Gly Asn Ile Ser Lys Gln Asp Glu Thr 440 445 435 Met Met Thr Asp Leu Ser Ile Leu Pro Ser Ser Asn Phe Thr Leu Lys 455 460 Ile Pro Leu Glu Glu Ser Ala Glu Ser Ser Asn Phe Ile Gly Tyr Val 470 475 Val Ala Lys Ala Leu Gln His Phe Lys Glu His Phe Lys Thr Trp 490 485 <210> 3 <211> 1957 <212> DNA <213> Homo sapiens <220> <221> CDS <222> (241)...(1671) <400> 1 tgcgtcacct gcaggcccgg gccgcggggt tggtttccac cctggaggtt gctgacaccc 60 tgtgccctcg gctgacttcc agccggtggc acagacgcct ccagggggca gcactcaagc 120 gcatcttagg aatgacagag ttgcgtccct ctckgttgcc aggctggagt tcagtggcat 180 gttcwtagct cactgaagcc tcaaattcct gggttcaagt gaccctccya cctcagcccc 240 288 atg agg acc tgg gac tac agt aac agc ggg aac atg aag ccg cca ctc Met Arg Thr Trp Asp Tyr Ser Asn Ser Gly Asn Met Lys Pro Pro Leu 5 ttg gtg ttt att gtg tgt ctg ctg tgg ttg aaa gac agt cac tgc gca 336 Leu Val Phe Ile Val Cys Leu Leu Trp Leu Lys Asp Ser His Cys Ala 25 ccc act tgg aag gac aaa act gct atc agt gaa aac ctg aag agt ttt 384 Pro Thr Trp Lys Asp Lys Thr Ala Ile Ser Glu Asn Leu Lys Ser Phe tct gag gtg ggg gag ata gat gca gat gaa gag gtg aag aag gct ttg 432 Ser Glu Val Gly Glu Ile Asp Ala Asp Glu Glu Val Lys Lys Ala Leu 480 act ggt att aag caa atg aaa atc atg atg gaa aga aaa gag aag gaa Thr Gly Ile Lys Gln Met Lys Ile Met Met Glu Arg Lys Glu Lys Glu 70 65 528 cac acc aat cta atg agc acc ctg aag aaa tgc aga gaa gaa aag cag His Thr Asn Leu Met Ser Thr Leu Lys Lys Cys Arg Glu Glu Lys Gln 85 90 576 gag gcc ctg aaa ctt ctg aat gaa gtt caa gaa cat ctg gag gaa gaa Glu Ala Leu Lys Leu Leu Asn Glu Val Gln Glu His Leu Glu Glu Glu

100 105 110

gaa Glu	agg Arg	cta Leu 115	tgc Cys	cgg Arg	gag Glu	tct Ser	ttg Leu 120	gca Ala	gat Asp	tcc Ser	tgg Trp	ggt Gly 125	gaa Glu	tgc Cys	agg Arg	624
tct Ser	tgc Cys 130	ctg Leu	gaa Glu	aat Asn	aac Asn	tgc Cys 135	atg Met	aga Arg	att Ile	tat Tyr	aca Thr 140	acc Thr	tgc Cys	caa Gln	cct Pro	672
agc Ser 145	tgg Trp	tcc Ser	tct Ser	gtg Val	aaa Lys 150	aat Asn	aag Lys	att Ile	gaa Glu	cgg Arg 155	ttt Phe	ttc Phe	agg Arg	aag Lys	ata Ile 160	720
tat Tyr	caa Gln	ttt Phe	cta Leu	ttt Phe 165	cct Pro	ttc Phe	cat His	gaa Glu	gat Asp 170	aat Asn	gaa Glu	aaa Lys	gat Asp	ctc Leu 175	ccc Pro	768
atc Ile	agt Ser	gaa Glu	aag Lys 180	ctc Leu	att Ile	gag Glu	gaa Glu	gat Asp 185	gca Ala	caa Gln	ttg Leu	acc Thr	caa Gln 190	atg Met	gag Glu	816
gat Asp	gtg Val	ttc Phe 195	agc Ser	cag Gln	ttg Leu	act Thr	gtg Val 200	gat Asp	gtg Val	aat Asn	tct Ser	ctc Leu 205	ttt Phe	aac Asn	agg Arg	864
agt Ser	ttt Phe 210	aac Asn	gtc Val	ttc Phe	aga Arg	cag Gln 215	atg Met	cag Gln	caa Gln	gag Glu	ttt Phe 220	gac Asp	cag Gln	act Thr	ttt Phe	912
caa Gln 225	tca Ser	cat His	ttc Phe	ata Ile	tca Ser 230	gat Asp	aca Thr	gac Asp	cta Leu	act Thr 235	gag Glu	cct Pro	tac Tyr	ttt Phe	ttt Phe 240	960
cca Pro	gct Ala	ttc Phe	tct Ser	aaa Lys 245	gag Glu	ccg Pro	atg Met	aca Thr	aaa Lys 250	gca Ala	gat Asp	ctt Leu	gag Glu	caa Gln 255	tgt Cys	1008
tgg Trp	gac Asp	att Ile	ccc Pro 260	Asn	ttc Phe	ttc Phe	cag Gln	ctg Leu 265	ttt Phe	tgt Cys	aat Asn	ttc Phe	agt Ser 270	gtc Val	tct Ser	1056
att Ile	tat Tyr	gaa Glu 275	agt Ser	gtc Val	agt Ser	gaa Glu	aca Thr 280	att Ile	act Thr	aag Lys	atg Met	ctg Leu 285	aag Lys	gca Ala	ata Ile	1104
gaa Glu	gat Asp 290	Leu	cca Pro	aaa Lys	caa Gln	gac Asp 295	aaa Lys	gct Ala	cct Pro	gac Asp	cac His 300	gga Gly	ggc	ctg Leu	att Ile	1152
tca Ser 305	Lys	atg Met	tta Leu	cct Pro	ggg Gly 310	cag Gln	gac Asp	aga Arg	gga Gly	ctg Leu 315	Cys	gly aaa	gaa Glu	ctt Leu	gac Asp 320	1200
cag Gln	aat Asn	ttg Leu	tca Ser	aga Arg 325	tgt Cys	ttc Phe	aaa Lys	ttt Phe	cat His 330	Glu	aaa Lys	tgc Cys	caa Gln	aaa Lys 335	Cys	1248

cag g	ct c la H	lis	cta Leu 340	tct Ser	gaa Glu	gac Asp	tgt Cys	cct Pro 345	gat Asp	gta Val	cct Pro	gct Ala	ctg Leu 350	cac His	aca Thr	1296
gaa t Glu L	eu A	ac Asp 855	gag Glu	gcg Ala	atc Ile	agg Arg	ttg Leu 360	gtc Val	aat Asn	gta Val	tcc Ser	aat Asn 365	cag Gln	cag Gln	tat Tyr	1344
ggc c Gly G 3	ag a In I	itt [le	ctc Leu	cag Gln	atg Met	acc Thr 375	cgg Arg	aag Lys	cac His	ttg Leu	gag Glu 380	gac Asp	acc Thr	gcc Ala	tat Tyr	1392
ctg g Leu V 385	rtg g al G	gag Blu	aag Lys	atg Met	aga Arg 390	gly ggg	caa Gln	ttt Phe	ggc Gly	tgg Trp 395	gtg Val	tct Ser	gaa Glu	ctg Leu	gca Ala 400	1440
aac c Asn G	ag g Eln A	gcc Ala	cca Pro	gaa Glu 405	aca Thr	gag Glu	atc Ile	atc Ile	ttt Phe 410	aat Asn	tca Ser	ata Ile	cag Gln	gta Val 415	gtt Val	1488
cca a Pro A	agg a Arg l	att Ile	cat His 420	gaa Glu	gga Gly	aat Asn	att Ile	tcc Ser 425	aaa Lys	caa Gln	gat Asp	gaa Glu	aca Thr 430	atg Met	atg Met	1536
aca g Thr A	Asp I	tta Leu 435	agc Ser	att Ile	ctg Leu	cct Pro	tcc Ser 440	tct Ser	aat Asn	ttc Phe	aca Thr	ctc Leu 445	aag Lys	atc Ile	cct Pro	1584
ctt g Leu G	gaa g Glu ( 150	gaa Glu	agt Ser	gct Ala	gag Glu	agt Ser 455	tct Ser	aac Asn	ttc Phe	att Ile	ggc Gly 460	tac Tyr	gta Val	gtg Val	gca Ala	1632
aaa g Lys A 465	gct ( Ala 1	cta Leu	cag Gln	cat His	ttt Phe 470	aag Lys	gaa Glu	cat His	ttt Phe	aaa Lys 475	acc Thr	tgg Trp	taa	gaag	atc	1681
aataa	aaaaa actci aaati	ag g tt a tc d	gata: agtt: ctcc:	atgc tact ttaa	aa ta ta ta aa a	aaaca gttga atca	acag aatg aacg	t tg g ct t aa	cagg tagc tatg	aaag tatt tatt	tat aat	gtta actc	gct aaa	atat ttga	tcctga actatg gttaaa attagt	1741 1801 1861 1921 1957
<210: <211: <212: <213:	> 47' > PR'	Т	sapi	ens												
<400: Met A	> 4 Arq	Thr	Trp	Asp	Tyr	Ser	Asn	Ser	Gly	Asn	Met	Lys	Pro	Pro	Leu	
1 Leu <sup>v</sup>			Ile	5				Trp	10				His	15		
Pro S		Trp 35	20 Lys	Asp	Lys	Thr	Ala 40	25 Ile	Ser	Glu	Asn	Leu 45	30 Lys	Ser	Phe	
Ser (	Glu 50	Val	Gly	Glu	Ile	Asp 55		Asp	Glu	Glu	Val		Lys	Ala	Leu	

Thr Gly Ile Lys Gln Met Lys Ile Met Met Glu Arg Lys Glu Lys Glu 75 His Thr Asn Leu Met Ser Thr Leu Lys Lys Cys Arg Glu Glu Lys Gln 90 85 Glu Ala Leu Lys Leu Leu Asn Glu Val Gln Glu His Leu Glu Glu Glu 105 100 Glu Arg Leu Cys Arg Glu Ser Leu Ala Asp Ser Trp Gly Glu Cys Arg 125 120 Ser Cys Leu Glu Asn Asn Cys Met Arg Ile Tyr Thr Thr Cys Gln Pro 135 Ser Trp Ser Ser Val Lys Asn Lys Ile Glu Arg Phe Phe Arg Lys Ile 155 150 Tyr Gln Phe Leu Phe Pro Phe His Glu Asp Asn Glu Lys Asp Leu Pro 170 165 Ile Ser Glu Lys Leu Ile Glu Glu Asp Ala Gln Leu Thr Gln Met Glu 185 180 Asp Val Phe Ser Gln Leu Thr Val Asp Val Asn Ser Leu Phe Asn Arg 200 Ser Phe Asn Val Phe Arg Gln Met Gln Glu Phe Asp Gln Thr Phe 215 Gln Ser His Phe Ile Ser Asp Thr Asp Leu Thr Glu Pro Tyr Phe Phe 235 230 Pro Ala Phe Ser Lys Glu Pro Met Thr Lys Ala Asp Leu Glu Gln Cys 250 245 Trp Asp Ile Pro Asn Phe Phe Gln Leu Phe Cys Asn Phe Ser Val Ser 270 260 265 Ile Tyr Glu Ser Val Ser Glu Thr Ile Thr Lys Met Leu Lys Ala Ile 280 Glu Asp Leu Pro Lys Gln Asp Lys Ala Pro Asp His Gly Gly Leu Ile 295 300 Ser Lys Met Leu Pro Gly Gln Asp Arg Gly Leu Cys Gly Glu Leu Asp 310 Gln Asn Leu Ser Arg Cys Phe Lys Phe His Glu Lys Cys Gln Lys Cys 330 Gln Ala His Leu Ser Glu Asp Cys Pro Asp Val Pro Ala Leu His Thr 340 345 Glu Leu Asp Glu Ala Ile Arg Leu Val Asn Val Ser Asn Gln Gln Tyr 360 Gly Gln Ile Leu Gln Met Thr Arg Lys His Leu Glu Asp Thr Ala Tyr 380 375 Leu Val Glu Lys Met Arg Gly Gln Phe Gly Trp Val Ser Glu Leu Ala 395 390 Asn Gln Ala Pro Glu Thr Glu Ile Ile Phe Asn Ser Ile Gln Val Val 405 410 Pro Arg Ile His Glu Gly Asn Ile Ser Lys Gln Asp Glu Thr Met Met 420 425 Thr Asp Leu Ser Ile Leu Pro Ser Ser Asn Phe Thr Leu Lys Ile Pro 440 Leu Glu Glu Ser Ala Glu Ser Ser Asn Phe Ile Gly Tyr Val Val Ala 455 Lys Ala Leu Gln His Phe Lys Glu His Phe Lys Thr Trp 475

<210> 5 <211> 1485

<212> DNA

<213> Homo sapiens

<400> 5					oattanataa	60
atgaaaatta	aagcagagaa	aaacgaaggt	ccttccagaa	getggtggea	tattatatat	120
ggagatattg	caaataacag	cgggaacatg	aageegeeae	tettggtgtt	tactgtgtgt	180
ctgctgtggt	tgaaagacag	teaetgegea	cccacttgga	aggacaaaac	ggtgaagaag	240
gaaaacctga	agagttttc	tgaggtgggg	gagatagatg	cagacgaaga	ggtgaagaag	300
gctttgactg	gtattaagca	aatgaaaatc	atgatggaaa	gaaaagagaa	ggaacacacc	360
aatctaatga	gcaccctgaa	gaaatgcaga	gaagaaaage	aggaggeeee	tttaacaaat	420
aatgaagttc	aagaacatct	ggaggaagaa	gaaaggetat	tananattta	tacaacctcc	480
tcctggggtg	aatgcaggtc	ttgcctggaa	aataactyca	ttttaagaa	gatatatga	540
caacctagct	ggtcctctgt	gaaaaataag	actgaacggt	gastasatas	aaaggtgatt	600
tttctatttc	ctttccatga	agataatgaa	aaagatetee	gggagttgag	tataastata	660
gaggaagatg	cacaattgac	ccaaatggag	gatgtgttca	tagagagaga	atttaaccaa	720
aattctctct	ttaacaggag	ttttaacgtc	ccagacaga	aggettagt	ttttccact	780
acttttcaat	cacatttcat	accagataca	gacctaacty	attagasast	taggaagtta	840
ttctctaaag	agccgatgac	aaaagcagat	ettgageaat	gttgggatat	aacaattact	900
ttccagctgt	tttgtaattt	eagtgtetet	acciacyaaa	gractagra	ccacaaccacc	960
aagatgctga	aggcaataga	agatttacca	aaacaagaca	atagaaaaat	tgaccagaat	1020
ctgatttcaa	agatgttacc	tgggcaggac	agaggactgt	gtggggaact	cctatctcaa	1080
ttgtcaagat	gtttcaaatt	tcatgaaaaa	racttagaga	agggatga	attaatcaat	1140
gactgtcctg	atgtacctgc	tetgeacaca	gaattagacg	aggegaceag	geeggeeaac	1200
gtatccaatc	agcagtatgg	ccagattete	cagatgaccc	tatatassat	ggaggacacc	1260
gcctatctgg	tggagaagat	gagagggcaa	tttggctggg	thansagart	tastassaas	1320
gccccagaaa	cagagatcat	ctttaattca	atacaggtag	cccaaggac	ttaatataat	1380
aatatttcca	aacaagatga	aacaatgatg	acagacttaa	geactergee	tagatagata	1440
ttcacactca	agatccctct	tgaagaaagt	getgagagtt	ctaacttcat	tggctacgta	1485
gtggcaaaag	ctctacagca	ttttaaggaa	cattttaaaa	eetgg		1403
.210. 6						
<210> 6				•		
<211> 1431 <212> DNA						
	ganiene					
<213> Homo	sapiens					
<400> 6						
atgaggacct	gggactacag	taacagcggg	aacatqaaqc	cgccactctt	ggtgtttatt	60
atgaggacct	gggactacag	taacagcggg	aacatgaagc tccqcaccca	cgccactctt cttggaagga	ggtgtttatt caaaagtgct	60 120
gtgtgtctgc	tgtggttgaa	agacagtcac	tccgcaccca	cttggaagga	caaaagtgct	
gtgtgtctgc atcagtgaaa	tgtggttgaa acctgaagag	agacagtcac tttttctgag	teegeaceea gtgggggaga	cttggaagga tagatgcaga	caaaagtgct tgaagaggtg	120
gtgtgtctgc atcagtgaaa aagaaggctt	tgtggttgaa acctgaagag tgactggtat	agacagtcac tttttctgag taagcaaatg	tccgcaccca gtgggggaga aaaatcatga	cttggaagga tagatgcaga tggaaagaaa	caaaagtgct tgaagaggtg agagaaggca	120 180
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc	tgtggttgaa acctgaagag tgactggtat cagaaacaga	agacagtcac tttttctgag taagcaaatg gatcatcttt	tccgcaccca gtgggggaga aaaatcatga aattcaatac	cttggaagga tagatgcaga tggaaagaaa aggtagttcc	caaaagtgct tgaagaggtg agagaaggca aaggattgaa	120 180 240
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac	agacagtcac ttttctgag taagcaaatg gatcatcttt cctgaagaaa	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa	120 180 240 300
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg	120 180 240 300 360
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca	120 180 240 300 360 420
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca caggaagata	120 180 240 300 360 420 480
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg aatgaaaaag	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggcctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag	120 180 240 300 360 420 480 540
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgacccaa	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg aatgaaaaag atggaggatg	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctccccat tgttcagcca	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg	120 180 240 300 360 420 480 540 600
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg gatgtgaatt	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca ctctctttaa	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgacccaa caggagtttt	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg aatgaagaag atggaggatg aacgtcttca	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat tgttcagcca gacagatgca	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg gcaagagtt	120 180 240 300 360 420 480 540 600
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg gatgtgaatt gaccagactt	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca ctctctttaa ttcaatcaca	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgacccaa caggagtttt tttcatatca	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg aatgaagaag atggaggatg aacgtcttca gatacagacc	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat tgttcagcca gacagatgca taactgagcc	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg gcaagagtt ttacttttt	120 180 240 300 360 420 480 540 600 660 720
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg gatgtgaatt gaccagactt ccagctttct	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca ctctctttaa ttcaatcaca ctaaagagcc	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgacccaa caggagtttt tttcatatca gatgacaaaa	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg aatgaaaaag atggaggatg aacgtcttca gatacagacc gcagatcttg	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat tgttcagcca gacagatgca taactgagcc agcaatgttg	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg gcaagagtt ttacttttt ggacattccc	120 180 240 300 360 420 480 540 600 660 720 780
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg gatgtgaatt gaccagactt ccagctttct aacttctcc	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca ctctctttaa ttcaatcaca ctaaagagcc agctgttttg	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgacccaa caggagtttt tttcatatca gatgacaaaa taatttcagt	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg aatgaagaatg atggaggatg aacgtcttca gatacagacc gcagatcttg gtctctattt	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat tgttcagcca gacagatgca taactgagcc agcaatgttg atgaaagtgt	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg gcaagagtt ttacttttt ggacattccc cagtgaaaca	120 180 240 300 360 420 480 540 600 660 720 780 840
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg gatgtgaatt gaccagactt ccagctttct aacttctcc attactaaga	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca ctctcttaa ttcaatcaca ctaaagagcc agctgttttg tgctgaaggc	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgaccaa caggagtttt tttcatatca gatgacaaaa taatttcagt aatagaagat	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg aatgaagaatg aatgaggatg aacgtcttca gatacagacc gcagatcttg gtctctattt ttaccaaaac	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat tgttcagcca gacagatgca taactgagcc agcaatgttg atgaaagtgt aagacaaagc	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg gcaagagtt ttacttttt ggacattccc cagtgaaaca tcctgaccac	120 180 240 300 360 420 480 540 600 660 720 780 840 900
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg gatgtgaatt gaccagactt ccagctttct aacttctcc attactaaga ggaggcctga	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca ctctctttaa ttcaatcaca ctaaagagcc agctgttttg tgctgaaggc tttcaaagat	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgacccaa caggagtttt tttcatatca gatgacaaaa taatttcagt aatagaagat gttacctggg	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg aatgaagaatg atggaggatg aacgtcttca gatacagacc gcagatcttg gtctctattt ttaccaaaac caggacagag	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat tgttcagcca gacagatgca taactgagcc agcaatgttg atgaaagtgt aagacaaagc gactgtgtgg	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggcctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg gcaagagtt ttacttttt ggacattccc cagtgaaaca tcctgaccac ggaacttgac	120 180 240 300 360 420 480 540 600 720 780 840 900 960
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg gatgtgaatt gaccagactt ccagctttct aacttcttcc attactaaga ggaggcctga cagaatttgt	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca ctctctttaa ttcaatcaca ctaaagagcc agctgttttg tgctgaaggc tttcaaagat caagatgtt	agacagtcac ttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgacccaa caggagtttt tttcatatca gatgacaaaa taatttcagt aatagaagat gttacctggg caaatttcat	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaaag gaagaagaaa ctggaaaata aataagattg aatgaagaatg aatgaggatg aacgtcttca gatacagacc gcagatcttg gtctctattt ttaccaaaac caggacagag gaaaaatgcc	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat tgttcagcca gacagatgca taactgagcc agcaatgttg atgaaagtgt aagacaaagc gactgtgtgg aaaaatgtca	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg gcaagagtt ttacttttt ggacattccc cagtgaaaca tcctgaccac ggaacttgac ggctcaccta	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg gatgtgaatt gaccagactt ccagctttct aacttcttcc attactaaga ggaggcctga cagaatttgt tctgaaqact	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca ctctctttaa ttcaatcaca ctaaagagc agctgtttg tgctgaaggc tttcaaagat caagatgttt qtcctgatgt	agacagtcac tttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgacccaa caggagtttt tttcatatca gatgacaaaa taatttcagt aatagaagat gttacctggg caaatttcat acctgctctg	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg aatgaagaatg aatggaggatg aacgtcttca gatacagacc gcagatcttg gtctctattt ttaccaaaac caggacagag gaaaaatgcc cacacagaat	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat tgttcagcca gacagatgca taactgagcc agcaatgttg atgaaagtgt aagacaaagc gactgtgtgg aaaaatgtca tagacgaggc	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggcctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg gcaagagtt ttacttttt ggacattccc cagtgaaaca tcctgaccac ggaacttgac ggatcaccta gatcaggttg	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg gatgtgaatt gaccagactt ccagctttct aacttcttcc attactaaga ggaggcctga cagaatttgt tctgaagact gtcaatgtat	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca ctctctttaa ttcaatcaca ctaaagagcc agctgtttg tgctgaaggc tttcaaagat caagatgttt gtcctgatgt ccaatcagca	agacagtcac ttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgacccaa caggagtttt tttcatatca gatgacaaaa taatttcagt aatagaagat gttacctggg caaatttcat acctgctctg gtatggccag	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaaag gaagaagaaa ctggaaaata aataagattg aatgaagaatg aatggaggatg aacgtcttca gatacagacc gcagatcttg gtctctattt ttaccaaaac caggacagag gaaaaatgcc cacacagaat attctccaga	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat tgttcagcca gacagatgca taactgagcc agcaatgttg atgaaagtgt aagacaaagc gactgtgtgg aaaaatgtca tagacgaggc tagaccggaa	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg gcaagagtt ttacttttt ggacattccc cagtgaaaca tcctgaccac ggaacttgac ggctcaccta gatcaggttg gcacttgag gcacttgag	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080 1140
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg gatgtgaatt gaccagactt ccagctttct aacttctcc attactaaga ggaggcctga cagaatttgt tctgaagact gtcaatgtat gcaacgcct	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca ctctctttaa ttcaatcaca ctaaagagc agctggttttg tgctgaaggc tttcaaagat caagatgttt gtcctgatgt ccaatcagca atctggtgga	agacagtcac ttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgacccaa caggagtttt tttcatatca gatgacaaaa taatttcagt aatagaagat gttacctggg caaatttcat acctgctctg gtatggccag gaagatgaga	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg aatgaagaatg aatggaggatg aacgtcttca gatacagacc gcagatcttg gtctctattt ttaccaaaac caggacagag gaaaaatgcc cacacagaat attctccaga gggcaatttg	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat tgttcagcca gacagatgca taactgagcc agcaatgttg atgaaagtgt aagacaaagc gactgtgtgg aaaaatgtca tagacgaggc tgacccggaa gctgggtgtc	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg gcaagagtt ttacttttt ggacattccc cagtgaaaca tcctgaccac ggaacttgac ggacttgac	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080 1140
gtgtgtctgc atcagtgaaa aagaaggctt aaccaggccc cacaccaatc cttctgaatg gcagattcct acctgccaac tatcaatttc ctcattgagg gatgtgaatt gaccagactt ccagctttct aacttctcc attactaaga ggaggcctga cagaatttgt tctgaagact gtcaatgtat gacaccgcct gaaggaaata	tgtggttgaa acctgaagag tgactggtat cagaaacaga taatgagcac aagttcaaga ggggtgaatg ctagctggtc tatttccttt aagatgcaca ctctctttaa ttcaatcaca ctaaagagcc agctgtttg tgctgaaggc tttcaaagat caagatgttt gtcctgatgt ccaatcagca	agacagtcac ttttctgag taagcaaatg gatcatcttt cctgaagaaa acatctggag caggtcttgc ctctgtgaaa ccatgaagat attgacccaa caggagtttt tttcatatca gatgacaaaa taatttcagt aatagaagat gttacctggg caaatttcat acctgctctg gtatggccag gaagatgaaaa agatgaaaaa	tccgcaccca gtgggggaga aaaatcatga aattcaatac tgcagagaag gaagaagaaa ctggaaaata aataagattg aatgaagaatg aatgaggatg aacgtcttca gatacagacc gcagatcttg gtctctattt ttaccaaaac caggacagag gaaaaatgcc cacacagaat attctccaga gggcaatttg atgatgacag	cttggaagga tagatgcaga tggaaagaaa aggtagttcc aaaagcagga ggctatgccg actgcatgag aacggttttt atctcccat tgttcagcca gacagatgca taactgagcc agcaatgttg atgaaagtgt aagacaaagc gactgtgtgg aaaaatgtca tagacgaggc tgacccggaa gctgggtgtc acttaagcat	caaaagtgct tgaagaggtg agagaaggca aaggattgaa ggccctgaaa ggagtctttg aatttataca caggaagata cagtgaaaag gttgactgtg gcaagagtt ttacttttt ggacattccc cagtgaaaca tcctgaccac ggaacttgac ggctcaccta gatcaggttg gcacttgag tgacttgag tgacttgcc tctgcctcc	120 180 240 300 360 420 480 540 600 720 780 840 900 960 1020 1080 1140 1200 1260

tacgtagtgg caaaagctct acagcatttt aaggaacatt ttaaaacctg g 1431 <210> 7 <211> 72604 <212> DNA <213> Homo sapiens <220> <221> misc\_feature <222> 14635, 14685, 29727, 29879, 29880, 29930, 29939, 29950, 29953, 41743, 41754, 41758, 41764, 41778, 41781, 41796, 52480, 55325, 56658, 59051, 59067, 59070, 59073, 59093, 59146, 59148, 59149, 59151, 59172, 59178, 72168, 72236, 72243, 72247, 72303, 72308, 72312 <223> n = a, c, g, or t<400> 7 acattttaag ctacttatag tccttggaaa tagcaacaaa tatcttagtt attggactat 60 tataacctta gtcatcttat tactgcttga ttatgagaca ctctccctgc taatccttag 120 aacatcttgg ttcttggtac ttgactttta gcccctctga catatagttg atgtcagagt 180 240 gtctggcatt tcagtagtgc tctattttac aaatcccagt aaactgctcc actgtggctt gtttatgtgt taatactgct tgttttctgt tataaattat tttttgcttt ggagtaagat 300 360 atcatcattt tgcatagcta caaatctgaa gttaaagaaa attttaaaaa tgtaattgtg 420 ggaaaataac aaatagatct gctgagatgg aggctttgac taatgtttta ataacaggca 480 agccccatta agataaatgc tcaaattctg ggaacatttc acttgctttg ccagcaattt 540 taccettcag agggtgtgga tetaatcagg ggaacaaact accetggget taattetcat 600 660 taacagggac taatttgtca aagcggcagt actagctgaa gtgatgggta tggaagcatt 720 cactgtgagg attttgctga ggtgcctggc acagggtagg ggaactcacc caggctgcaa gatgctaaca gttcaggttc aaggtcttag tgtggactaa ggtgcagtca ggatgggaac 780 aggtgcaact tgggccaaca tcagtatgaa gggcctgatc tgagggcagg ggaaggaggg 840 900 ggcattctgg gaagcaagag ttcctggtat cctgttgacc agagtcttgg cccaaggatc aacqtatqaa ttaaaqtaqa aataccaqaa acaaaqaaaq ttqqcaqaaa ctaqqaqaaq 960 cagagtetea gecaactgga etgggeteag cettggetae tggeeeggea gatgatagaa 1020 gagaaaacca ggaacccagg ctgaagccca gtggttgggc tggccacaca ccatgcatag 1080 ccttaaaggg gtggcctaag ggcatggtcc gctccaaaaa aggaaagggg gccccagaat 1140 attictgaat cocactcact gccagggaag aacctctcaa ttcactcaat agtgcattct 1200 cctgcttctc aataggctaa tactctagag aatatgggga caaggggagg agggtctagt 1260 ggaacaggtc taaactggcg tttgaatttt aagataagtt aatcatacat tggctgggtc 1320 agccatgtct cttagtcttt acaaaagtag aacacaaaaa aattcaatgg aaatctacag 1380 acacctattt gcagatgagg aaacacggct atgaagattg ggaagattgg gaagaactgg 1440 1500 ccaggtgtgg tgctcacgcc tgtaatccca gcactttggg aggccgaggc tggtggatca 1560 cttgaggtca ggagttggag accagcctgg gcaacatagt aaaaccctgt ctctactcaa 1620 attacaaaaa tcagcagggc gttgtggtgc ccacctgtaa tcccagctat gcaggaggct gaggcaggac aatcacttga acctggtagg cggaggttgc agtgagccaa aatcacgcca 1680 ctgtactcca gcctgggtga cagagcaaga ctttgtttaa aaaaaaaaa aaaaagggaa 1740 gaactaaaaa tgtaattttc aaggggctat cacaaatggt cccaataaag agaaagcagg 1800 actcatgttt aagaaaccca tgagatgtgt atggacctca tggaagagct cttgctttct 1860 aatgatctac gtaacagatg aaaagcagag catagggcta aggatgaaaa tacaacagta 1920 ataaqqtatt aatatattat taaqaaaqct aatqctccac ataaqcaqaq qacattaaaq 1980 ggactttttt ttcttaagga tatcttaatg ttttaaatga gaagacatag aaagggatag 2040 gtccaactct tgggattgtt gcaggttggt ttccatcgga agcactctga gtctgagatt 2100 tgtatgcaga aaattaattt gaatgtgctt ttcagatcac ccaggtgggg gagggaggaa 2160 accaggactg ggcagagaga ggctgggctg taaccaagtc acaacaaagg tgtcagctgg 2220 teccatggtg aattetggae etaggatgge tgateceaag geattecaaa etggggeaag 2280

gaagttgtgc	tttaaaactt	ctcattgact	gtcagtcact	gggcatgagc	agtccccagg	2340
aaggggggat	gaccttgagc	aaggtggatg	tcttcagcca	agggcaayca	ctgggaagga	2400
				tctgagagga		2460
aattctaagg	gcaggggctc	caagggcagg	ggtacggatg	gtggaatctg	ggcagtacct	2520
tataacttcc	actacaqtcc	accccttgca	ccacttagtt	ccactggctt	tttttttt	2580
tttcttttct	gagacagtct	cactctqtca	cccaggctgg	agtgcggtgg	cacgatctcg	2640
gctcgctgca	acctcccct	cccaggitca	agcaattctt	gaacctcctg	agtagctggg	2700
actacagatg	tataccacca	cacccagcta	attttttgta	tttttagtag	agacggggtt	2760
ttaccatatt	agccagattg	gtctcgatct	cctgacctca	tgatccgcct	actttaacct	2820
aggaaagtag	tagattaca	gatatagacc	accocacaca	gccagatcca	ctggcttcta	2880
tataattat	ragtanaget	aattaagaat	tetgatggae	ctgtcttccc	gagggaaact	2940
						3000
tytaaaayya	aagttagagg	tagattaga	ageceeegee	acagcagctg	accettacto	3060
caaaaatggt	geteeteatt	tecettaace	accegaceca	gattccccta	vanmuagat	3120
				krwycmrrwy		3180
				gtggctgttg		
				gctctgtcac		3240
				ccaagctcaa		3300
				caccatgccc		3360
				gtttcccagg		3420
				agtgctggga		3480
				aaaattgaat		3540
				cttctcctcc		3600
				actcctttcc		3660
				catttgaaat		3720
				caagatcttt		3780
				gatgactggg		3840
gaactgtttc	cacccttgat	ttgctgcacc	catgtgttct	acctaggaga	tagcacacca	3900
tatactggtt	attcatttgg	attacatgct	gcatcccgga	gaatgggcac	tgcattctca	3960
ctggtcatca	tgtcagagcc	tgcgctgcag	aggctttccc	attgctctgt	cagtgtgtta	4020
				cctccattct		4080
				aatagaataa		4140
gttctggctg	aagctttaca	agcagaaaag	gccaaccgat	gactgaaata	agcgttgagc	4200
				gtctagtgta		4260
				tctgcattca		4320
				atctctgcca		4380
				aatcactgaa		4440
				gctctgtcgc		4500
				ccggcttcaa		4560
cqcctcaqcc	tccagagtag	ctgggattat	aggcatgcgc	caccacgcct	ggctaatttt	4620
tqtattttta	qtaqaqacaq	tcttttgcca	tattagtctg	tctggtctcg	aactcctgac	4680
ctcaqqtqat	ctqcccqcct	tggccttccg	gagtgctagg	attataggcg	tgagccacca	4740
				ataagaaaaa		4800
				tagatgtgaa		4860
acatactttt	tctttactct	tgagaggttg	tttggaggtt	ccagcagggg	accacagcta	4920
ctcgtatacc	cttgaccaaa	gactggtcct	tgtctatcaa	ggatggtcgt	cttcttccac	4980
caaqcacaca	gcttctggag	ggacgcacat	qqaqtqqtqa	gggaggaagg	ggacacccgc	5040
ctagccagct	agatcagcca	agcagaataa	accetagtag	tcaatggggt	gacagtgtcg	5100
				cttaacattt		5160
				gaaagtcttt		5220
caccttttt	tttttttt	tagagagaga	gteteetet	gttgtccagg	ctggagtgca	5280
				ttcaagtgat		5340
				tgcctagcta		5400
				tcttcagcct		5460
				ttytctttca		5520
tatttcactc	cactttcttc	ttacttatat	ggttctgaag	ataatgatat	aattcttatt	5580
cttatttctc	tacaggtaag	ataatttat	acctictogot	tctttcgaga	atttctcttt	5640
				atagacttgg		5700
geceegace	Joelacagee	-544646			JJ	<del>-</del>

		ctccctaagt				5760
		acttcaaata				5820
tgtgccaact	ttttaattga	tacatagtat	tttacatatt	tatggggtac	atgtgatact	5880
tcattacctg	catagaatgt	gtaaatgatc	tagtgaaggt	gtttggacta	ttaccttgag	5940
tatgtatcgt	ttctatgtgt	tgggagcttt	tcaagtcctc	tcttgtaaca	attttgaaat	6000
atacaatgcc	ttgttgttaa	ctagtcaccc	tgctctgctc	tcaaacacta	ggatttattc	6060
cttctqtcta	actgggtgtt	tgtacccatt	aaccaacctg	tcttcatccc	ctctacccac	6120
atacetttee	cagcettggg	tatctatcat	tctactcttt	acctccatga	gatcagcctt	6180
		gagaacatgt				6240
		tattccatcc				6300
		tagtgttcca				6360
		ctgaggttga				6420
cactegeaca	aaaataaa	gtatcccttt	aatataccca	tttcttttcc	tttqqataaa	6480
Caacaacac	gggggtgcag	gratecter	atacatatat	tttaagtttt	ttgagaaacc	6540
tacccagtaa	tgggattget	ggatcatgtg	ttagattaga	atgastagta	tatgagaaacc	6600
tccatactct	tecateatgg	ctgtattaat	ttacattccc	accaatagta	atagagette	6660
CTTTTTTC	tgcatcctca	ccagcatcta	ttattttgt	Ciliacada	atggeette	
taaccagggt	aagatgatat	ctcattgtgg	ttttgatttg	catctccctg	atgagtagtg	6720
		tgcccattgg				6780
		gtttatgctc				6840
		tttaattgtc				6900
attctttctt	ctctttgtat	ttcagttttg	gaagtttcta	ttgatattca	agctcactga	6960
ttcttcctct	ggctctgttc	agtctattaa	taagcccttc	aaagcctttc	tctctcttc	7020
		tctctcttc				7080
		ctttctcttt				7140
		cctttcttc				7200
		ttccttcctt				7260
		tttctttctt				7320
tttcgaccag	ttctcactat	gttgctcagg	ctagcctaga	acccctgggc	tcaagttatc	7380
ctctcagctc	agcctttcaa	gtaggtggga	caaatgcgcc	attctatcat	acccaacaat	7440
tcctcatttc	tgttacagtg	gtttttattt	ctagcatttt	cttttgattc	tttcctagag	7500
tttccatctc	tctgcttaca	tacacatttg	ttctctcata	ttttccactt	tttccattag	7560
		gttattttca				7620
tatatttgag	tctgtatcta	tgcttggttt	gtctcctcag	actgcgtttt	ttccttttag	7680
gatgtccctt	atcattttt	gttgaaaaca	agacatgatg	tatcagataa	aagtaattga	7740
		gaggttttat				7800
		tgccagaggc				7860
		ttccacagag				7920
		tattatacag				7980
		cagtcctgtg				8040
tacttccctt	tecettteta	catgttagag	taacctaaaa	ttgggggtat	ccattacccc	8100
aggttggtag	gctttggtaa	aaccacagtc	tatcaagctg	togtaaaata	gtttccctgc	8160
agtotagott	tattaaggat	aacagagggc	tctagagata	tttcaaaatt	gctacttttc	8220
ctctctccct	atcadaadca	caaggagatt	tetettgate	ttcaccctga	gagtctggtg	8280
gggttggtgg	acctasaact	caggaaagtg	taaaaacctc	cacacaaagg	gtctgctgaa	8340
gggtttttgg	taggeddddet	tctctaatgg	atctaagaag	agttattgat	tttcaatttq	8400
		gaagacagaa				8460
aggaaagga	atattattt	caattagcaa	ttacatataa	caatggtaca	ttgcatttat	8520
acceaaccec	ttastattta	caactaycaa	tttttccta	ttatattact	caattcattt	8580
		cctgtgtatc				8640
cttagtteta	ggaattttt	aaatacatcc	ttataggacac	tattattat	ttaattat	8700
accegcacat	agggacagtt	ttatttcttt	actatatta	aataagagt~	atasasatas	8760
tgccttattg	cagtggctag	aacttgcagc	actatattaa	aataayaytg	graaaagrya	8820
		atcttggggg				8880
		taaatcttta				
		ataaatgtgt				8940
		cttctttagt				9000
attattgaac	cagcctgcat	tcctggaata	aaccccattt	ggtcatgatg	cataattett	9060 9120
ttttttatat	tgctgaattc	tatttgctaa	tattttgtta	aggatttttg	calcigigit	9120

catgagggat	ctgggctggt	aggtttttt	ccccctgca	atgtctctgt	ctggttttgg	9180
		ttttktttt				9240
tggagtgcag	tggcacgatc	ttggctcact	gcaacctcca	cctcccaggt	ttaagcgatt	9300
		gtagctggga				9360
ttggtattaa	ggtaatatta	tcatcataaa	atgaactggg	aagtgtgccc	tcttcttgta	9420
tttcttttt	tttttttgag	acagtcttgc	tgttgcccag	gctggagtac	agtggtacga	9480
tcatggctca	ctgcagcctc	aaactcccag	gctcaagtga	tcttcctgcc	tcagccttcc	9540
cagtacaggg	gcaggctacc	acatctggcc	aatttttaaa	tttttcttt	gtagagaggg	9600
		ggatctcaag				9660
		gtgtcaattc				9720
gaagctgtat	gggcttgaag	attacttttt	tttcttttt	ttttgagatg	gaatttcact	9780
cttgtcgccc	aggctgtagt	gcagtggtgt	gacctctgct	cactacaacc	tetgeetece	9840
acgttcaggt	gattcccctg	ccttactcag	cctctggagg	agctgggatt	acaggcaccc	9900
gccaccatgc	ccggctaatt	ttttgtattt	ttagtagaga	cggggtttca	ccatgttgac	9960
cagactggtc	tcgaactcct	gacctcaagt	gatccacccg	cctcggcctc	tcaaagtgct	10020
gggattacag	gcatgagcca	ccgcgcccag	ctgaagattt	ctttttgggg	agttttaaat	10080
tatacaatca	atttgcttaa	taggtataag	ctattcaagt	tatctatttt	atactggatg	10140
		tatgagttta				10200
		tagtattccc				10260
		ttcctagtat				10320
ctctctct	ctctggtcag	tctttccaga	ggtttgtcaa	ttttgttgac	ttttttcccc	10380
caaagaatca	gctctttgtt	tcatggattt	tctgcttttc	tgttttcaac	ttcattgatt	10440
		tccttctgtt				10500
		ttacattatt				10560
tgcatttagt	attctaaatt	tacttctkag	tactgcatac	tgcttgaact	atgtctgaca	10620
		aaatctttat				10680
		ttatttagaa				10740
		tgattccatc				10800
		gctttgttta				10860
		tatgtatgtg				10920
		tctataagcg				10980
		ctgatttaaa				11040
		gtgaattgtg				11100
		tacaactctg				11160
		cttggtggat				11220
ctgtccctgg	taattgtggt	tgctctgaag	tctatgttat	ctcaatataa	atagacaact	11280
		tttacatgat				11340
		aagtgagctt				11400
gtacatagat	atatatattt	ttttgagatg	gtgtactctg	tcacccaggc	tggagtacag	11460
tagtgctcac	tgcaacctct	gcctcctggg	tcaagtgatc	tcgtgcckca	gcckccccag	11520
tagctgggat	tacaggcacg	caccaccatg	cccagctaat	ttttgtattt	ttagtagaga	11580
cgggtttaac	catgatggac	aggctggtct	cgaactcccg	acctccagcg	attagcccac	11640
		gcattacagg				11700
taatccactc	agtctttgtc	ttctactggt	gtacatagac	attcgcatgt	aatgtaaatg	11760
ttgatatgta	agagettgaa	tctgttatgt	ttttgctttc	tctatgtttt	ctcaattttt	11820
		ttctgcttca				11880
		ttttttagtg				11940
		gtacataact				12000
		aatgtttcct				12060
		gtacatacat				12120
		aactcaagaa				12180
		tcttccctct				12240
		gccattctat				12300
		atgtctttat				12360
		tattgggtct				12420
		aaaataaaat				12480
tgaaagtata	attcactqaa	tgaggaggga	cacccatctc	tataatctgg	aggcccatgc	12540
J J = - 7	<b>J</b> •••	3 33 333		55		

tracctrtga	atagtacatt	tgcagagaaa	ttggggaaat	caaaqtctgt	tgagaccagc	12600
aagataaata	aggcaaaagg	atacaaaacc	atatccaaaq	agaaatggtt	taaaggaact	12660
aagactattt	ctcctaaaaa	gaaaatagtt	ggagacatgt	gacctccaaa	gaaacaggac	12720
tttttctatq	gggctccaag	gggtttctat	gagagaatga	taaaggagag	atttcagctt	12780
agtctcagga	agacttttca	acaaccaaac	ctgcccaaaq	atggactgcc	ctgcctaagg	12840
attatattat	gacattaagg	gtatggaggt	atgggttaga	tgaatatttt	accaaaatgc	12900
catacatatt	tcaggctatt	gatgttgtaa	tatcatacta	ggcaactcca	cttcaatatg	12960
agtetetato	atgtaaaatg	aaataggatg	totttcgata	qaqagttgca	gatttcattt	13020
tgatgttagc	gaccacacaa	aattactttc	cctacataaq	aacatgttat	tactctagtt	13080
gatgatgact	acttatagga	aatgtgtctg	ctttqttaqq	aatcttgcct	aatatatgta	13140
taattcaaga	togtattata	aagtgacata	tatgatttta	acatttgcac	ttaaaataac	13200
acttattctq	taccatomas	tgtctaggag	cttctacata	ttccattatt	atctttattt	13260
tacaagacag	ggaactaagg	catggagaga	ttgagtaatt	tgtgcaatat	tacctaccta	13320
gtaagtggta	aaggaaagat	tggaacccat	tctqqctcca	ggatccaggc	tcaaagccaa	13380
tatactatcc	accaccccaa	ctctttagtt	tgatcaattt	qtcaaattat	tttacagtta	13440
tttatctqta	aattaaggg	ataattgccc	agtcaataaa	tatatcccct	tcaaaggtta	13500
catacttaac	caatggtgct	actgggctca	gaacattttt	qqaactacga	ttttggtggc	13560
aaccaaaaaa	cctccagtac	attcctctga	acattctcca	qaqqcaagtc	tttctccatg	13620
gagactgggc	ttcatttttt	gaattagcct	gaagttgttt	gaggtcaaat	ctgatgaaaa	13680
gagaccgggg	ggaagctgga	tattttcgtt	cqtqatttaa	aacagtaaat	gccacctaaa	13740
tgagaggggg	actttctttq	aatgttttgt	aaactggctt	tgaaggtact	tctttaaaaa	13800
agaagcacaa	gaaagacggt	gactggcaac	agcctcactg	gaatacgtct	ctaatcatca	13860
aggcaaccca	cactcatttq	gatgtgtgca	tccggtgatg	ttattatttt	taaagttatg	13920
tgccacaaag	atgcattctt	tgctatacaa	aagagctgtt	gttaaattta	taaagatata	13980
aaaaggggaa	aggagaaggc	accaaatgga	agattettag	gcattaagtg	ctcagacagc	14040
atagatette	attagatgac	gtcagggaga	agagacacag	actttgccat	ctcaggtaga	14100
agtatcaaag	tcatcagcct	cctagtaaga	cagacctggg	tttgaagctc	tgcacagcca	14160
tttcctagct	gatctagaga	aaaattactt	cttgaagcct	cagtgtcttt	atttgtaaag	14220
taagtggaat	tatattacct	tgtcaggatg	ttgtcagaat	tagaaataat	ttaaagaggt	14280
ccagcacgag	caggtcaatc	aagggaagat	gttaaaaata	acaacaggtg	aaatgtactc	14340
ccaaaagata	aagtggatac	atagatgaat	cttcctcaca	cacagagtat	aataacctca	14400
gaaaaatatt	gcctagagta	aacatgcctc	ccaagccaac	gttcatcatc	caggaatacg	14460
gagaggatgt	ttgggatatg	gggggcatga	aattttacaa	ttgtagggcc	ctttaacaag	14520
ggtagacttg	caagttgcac	tgmctttcct	gccctcctct	ggctacctgt	tccagcatcc	14580
agagtttgtg	aacctggggm	ccaaggacag	caccctggca	tgggcaggcc	cactnggcga	14640
ctctctcagg	gctgctgcag	ctgtgtcagt	gtccccacag	ggagnctgac	atccagccat	14700
gaccatcgca	ttaagcccag	cagtcagggc	aggggagcaa	ctgctcagag	gcacctttga	14760
cccactactt	ttttcccctc	ctgctttatc	tgcccagagc	gaggetetet	ttctaatgtg	14820
tacaaggcgt	tctacctatg	actcgtggtc	ctgccataga	aatgcttttt	tttttttaa	14880
ctgaattaag	ttgccaagtt	tgaaaaatca	gaatttcaca	taagatccct	atttctgtct	14940
tcttttqaaa	aactgaatgt	tctttccaca	gtgagcccac	attccttcct	gacgaccatc	15000
accqttcaqc	tggagtagag	agggctctgc	tggcttcaga	tccggacgcg	caggtcctct	15060
gcaggccccg	cccacccggc	gtcacctgca	ggtcccgccc	acccggcgtc	tgcaggcccc	15120
gcccacccgg	cgtcacctgc	aggccccgcc	cacccggcgt	ctgcaggccc	cgcccacccg	15180
gcgtcacctg	caggccccgc	ccacccggcg	tctgcaggcc	ccgcccaccc	ggcgtcacct	15240
gcaggccccg	cccacccggc	gtctgcaggc	cccgcccacc	ctgcgtcacc	tgcaggcccg	15300
ggccgcgggg	ttggtttcca	ccmtggaggt	tgctgacacc	ctgtgccctc	ggctgacttc	15360
caqccqqtqq	cacagacgcc	tccagggggc	agcactcaag	cgcatcttag	gaatgacagg	15420
tgagarcatc	ctccgggccc	cagatttctc	tcctcgccgc	tcttgcccat	ttctccggag	15480
agccagagaa	agccgctccc	aagtccaagg	ccgagctccg	cagacgcccg	gcccctccgg	15540
cgcggacaga	acaaagccat	tgttcttgcc	ggggaaggta	gaaatactgt	gggctgcttc	15600
agaggctgcc	gagcaaaact	caggcaatct	cctgggctgt	tccaatacgt	ttattctctt	15660
tttcaaaaca	ggaggaggag	gtagaggcgg	ggagacacac	catccctgca	aaactactgg	15720
caaaaactaa	gcggagccgg	gtgtggtggc	tcacgcctgt	aatctcaaca	ctttgggagg	15780
ccgaggggg	ccgatcactt	gaggtcagga	gttggaggcc	agcctggccg	gcatggtgaa	15840
acacaaaaat	tagtcgattg	tggtggtgca	tgcttgtaat	cccatctact	tgggaggctg	15900
aggcaggaga	atcgcttgaa	cccgggaggc	ggaggttgca	gtgagccgag	attgcgccac	15960

tgcactccag cctggacaac acaagtgaga ttctgtctca aaataaataa ataaataaac 16020 16080 ccaagcagaa aaagaatcac tctgaaaacg atcacatcta actatcaatg ctcatacagt 16140 ttatggaatt atcagcccaa cttgataaaa tcagtatttg aggaaactgt ggataagccc cctgatttca atccccattg tgccaggtcc tggttaactg aggttaacga agtaaagagc 16200 tgcagacact attaactgct accttaaacc gattactcta gcttagccta ctttccacgt 16260 acagatttta ccagtggaca acatgatgct ttatcttgtt tttctctccc tgggactttt 16320 ctccagacat tgaaaacaga aatactaata aggccacttt tacctgcctg atgcaagaac 16380 agaattttca aactcaacat taatgcaact cctcagtccc tgacaatggc gggtggaaaa 16440 gtttctaaaa atatgcagca gcacaattat cgggaagaga tgagatactg ttacctaata 16500 aaaatgccat aaatagagaa tgatgaacta ccatgggaaa tgaatgcata gaagaggaca 16560 tgctggaatg tgggacagta aaaatcactt aaactttgcg tgaccttgaa gaaagtcacg 16620 atgatctgtt tttccaggtc cctcaaacag tgagatgtgg ctgtttccca agtcttcctc 16680 tccagtgtaa agggtctgaa tttagacgct ttgtgagtct tccttctttc gacagcctgg 16740 agtetetett gagteteaag getgeetgag tteeteteta acateeteta ggeagtatea 16800 gctaatgaga caatgaattc catggaggca gcagtgggaa cagaagtacc tctcttggat 16860 aatttacaac actggtgagc agagggtcag atcaccctgg ggtttgtgtc acaaccaaaa 16920 aagtggctgt ggcactgagt tcttggatgg ttttctacag ctggtccaga ttttccatgg 16980 gctcaccttt aaattaaaag aatttctgca ctttgaagaa tttgaaaaca aagccatgtg 17040 tgagaatatg agatccactc atatgccctt gcaagaaata ggttgcattc ctttttccgg 17100 acttaaaaaa aaagcacccc ctctttcttt ttttcagaag gcatatatgt aaatgattcc 17160 aaattaatct ttagcatgtg cctatgttgt tctgatttac taaactttaa aaatatgtcc 17220 17280 attgttgtct gttaacagct tttggcaact ttttcagaga ttgaaatatg tgagcaaatt agagaaatga gtacaattat tagctagtac cattcaacaa gcgctaaaga tacaaatacc 17340 tctacaatac ataaaaggaa tgattatagt agattttata atgccatata aggtttctta 17400 tttaacttca ttcttaattc tcaaaataaa atgaaattac atagaagcaa agtaatatag 17460 ttaccagaat agtattttta catgtcttta agtgtatgtt gttgttgttg tttttaaggt 17520 aattatgtga tgttgtggaa agaacagaga cctgggttag ataaaattcc ggttgtctac 17580 17640 aacaggattg gtaatactca tatcataagg ttgaaaggat taaatgaggc actatggaaa 17700 atttctaaca tggtggtgcc tgggacagta gaagatgctt aataaagata gctttcatta 17760 ttattattag ctttttcagg tgatggtgat tgtaaatgtt taggtaattt tttaaacttt 17820 agaaataatt gattttcaaa tgattaagac tgcttatttt aatcatttat ttttatcacc 17880 agatttattt ttattaccca aaatgtcaac gactgtcata aagataaaaa ttaataataa 17940 ttggccaggt gcggtggttc acgcctgtaa tcccagcact ttgggagctg aggtgggtag 18000 atcacaaggt caggagattg agaccatcct ggctaacgcg gtgaaacccc atctctacta 18060 aaaatacaaa aaattagctg ggtgtgttgg cgggcgcctg tagtcccagc tactcatagt 18120 cccagctact caggaggctg aggcaggaga atggtgtgaa cccgggaggc ggagcttgca 18180 gtgagccgag atcgcgccac tgcactccag tctgggctac agagccagac ttcatctcaa 18240 aaaaaaaaaa aaattaataa taatttaaac ccgaagtatg aactgaatta tttcccttag 18300 tagcacatca cataggctga tgatagtttt ggtgactggt ttatctattc ttcctaaaag 18360 caaactgttg ttagatggat gatcacttgc atgttgtgac tgaactcagc agttgggttt 18420 tattttttat tttttatttg cttcagtagc attadccttt cctaccaaga ttcgaacaat 18480 ccatttgcct ttttttccct aaaatctctc atacattgta aatactacat attggctaaa 18540 tatttcctgg acagacatga aggacacata aatcagtctc tgtatgatgt ttctcactgt 18600 aatggagttt atctggctca agaccaggac atttattgca tatcaggttt ctacagttca 18660 ggcaaaagtt tgaggataag gacttactgc aaaaagtctt ctattgttct caaccatttt 18720 ctcgcttagc acatgcagag atttgaaatg gtccgtggta cagtagttgt gtctgtatat 18780 ttctcttgta gaatattaga acaagggatt tgcagtttac agagaagaag gcttggcgag 18840 gtgtttggaa atacactcag aaacctgagg aaatttgtgg aaagagaggc ttattatttc 18900 tagaaatatg ctagagtwcg ttttgattgt gcacctgagg aattaataga ttaagtagtt 18960 19020 ttataaggac tggggttaat agaatactgg cagtgaagtt tgtcttagga cttcttaatt 19080 ggataatcag tgaagtcacc agatcccagt tagagacagt tccaagtttt acaaaacgca agataactgt ccaagagctg taatggctta atcatctttg aataatacct ctcactgaag 19140 ctatatcata agaaataaaa atctacattt taaaaaattg gctgtaatca tagggtgact 19200 aactgtccct gtttacccag gactcagggt ttcccaggct gagggacaat gggtactaaa 19260 accaggacag teccaggeaa actgggaegg ttgateacce tacceaatgg eetcatetgt 19320 19380 ctcattaaaa tatctggatt acttcgtgcc tcaaaaatat cctcggctta cctgactcta

gacagtcaag aagcttttat taattgtcta atgtatgcca ctttctggag gtgatattgt 19440 19500 tcaactgata gatgagcatc actgattgaa atattttgtg gttttcatgc tttgtatctt 19560 gtgctgatag ccccacatgg atatttctgt ttccaagttt gtgtcacttc tggagatatt agcctgaact cagcaaaata ggatgatcaa aatgaacctt tccagtgaat tctgtccttc 19620 ttgtgctgtt gtcatctgac ttagatatac tggccgggcg cggtggctca cacctgtaat 19680 cccagtactt tgggaggctg aggtggttgg atcccttggg atcaggagtt tgagaccagc 19740 ctggccaata tggtgaatga agccctgtct ctactaaaaa tacaaaaatt agttgtgcgt 19800 ggtgaagtgt gcctgtaatc ccaggtactc aggaggttga ggcaggagaa ctgcttgaac 19860 19920 cagggagtcg gaggttgcag tgagcccaga tcacaccact gcactccagc ctggcaacag agtgagactc catctcaaaa aaaaaaaaaa ttagctggat gtggtggcac atgcctgtaa 19980 20040 teccagetae etggaagget gaggeaggag aategettga acceaggaga eggaggttge agtgggacga gatcgtgcca ctgcactcca gcctgggtgt cacagcgaga ctccatctca 20100 20160 aaaaataaaa atcaataaaa aataaataaa tacataaata aatgaacaca taaattagat ataccaagaa aagtataaaa aagtcttgtg tgaacataaa tgaaaattgg ccaaaatagg 20220 20280 taacagacag ggtcaggcgt ggtggctcat gcctggaatc ccagtacttt gggaggctga 20340 ggtgggagga ccacttgagg ccaggagctc aagaccagct tgggcaacaa agcgagacct 20400 catctctatg aaagaaaaaa aaatttaaaa gacgtaatga acaacttgct tgccttcctg cctgccttcc ctaaaatact aagttaaatg caatacatgc cctgacattg tagtttgctt 20460 20520 tcacaaagat ttactgaata cttactctag gctaaacctt gtgctacatg ttggggctac 20580 agggatgaaa garaattggt cttgccctcc aggaaccttt catttagtac agagatttag tgtgtgctgg ttggtctctg ttctccccct ctcctccaga tctattctct atttcttccc 20640 ctctccctgc ctccaggaag gggggctgga tcactgtggc tcattgctct gtggcttctg 20700 attgagttca gccaatggga ggcatmattt tggcgtggca gctctggctg ttcctctgca 20760 20820 attgcagttc cctcctccaa ggctctggct ctcactgggt tcctgtatcc aataacagac 20880 tcccttaact gcccacttct gaaaacagtt tctgcataaa gctattttca taatttcctc 20940 tgatgtgcct tctgtttcct gtgtagaccc tgattcaata ggaaaataaa ttattgaaat agaggaagag acaggtaata atagaggtat acacaagtag aatggggcaa taaatggcgc 21000 21060 attttcgcac catcaagagt gcccatgtaa cagagataag taaatgcatc ttgagctgaa 21120 cactgaagga taagaaacaa aggggagaaa gacctagaag gggcaatata cagcaaggag 21180 ggaaaataaa ctactgtgca ttcatgccag tgttagcatt taggacatct ggaagctaga 21240 ggtggagtgg aaaaggagag agtgatagga gctggggtca gagagtttca gggtggggaa 21300 ggtcttgcag gaccttgtag gtaattgtaa agcatttgga ttttattctg agggtcactg gggtgtcatt agagactttt gagcaaagag gtacatgctc tgactgaact ttattctgtg 21360 21420 aacaatcaga atcaactaga tggatttaag tatgggtata ccatgaaaga aaattactta agateettge tacteaaagt atgageeagg accagetaca etggeatmag etgggaactt 21480 gttagaaatg cagaatccca agtccccgag acaaactgaa tcagaacctg cactttaaca 21540 agatcccagg tggcccattt gtatggtaga gtttaagaag cattggttta aaagatccct 21600 21660 cttgatagga gcatggaaga tacatttgag acagaataga caagtcagag acaggtggga 21720 agggcctaaa acagggcaga agtagggagg taaatgagga gacaaataca aaggaagaaa 21780 atgcacagca cagtgtagac aattcctaaa tacttaaaaa aattttttt gaaataatga 21840 tagattcaca ggaggttgca aagaaatgcg tagggaagaa caatgcaccc tttacccagc ctcctccatc attaacatct tatgcaacta tattataata tcgaaaacaa tcaagtgaca 21900 21960 ttgctacaac ccatagagct tattcagatt tcaccagtta ttagatgcac tcgtgtgtgt 22020 gtatgcatat agctctgtgt aattttatca tatgtgaagc tttgctacca caatcaagat attcaagcca ttagcagaag attttctggt gttacctcct tatagccaca cgcattcctc 22080 22140 catcattaac ccctgggaac aactaatctg ttcatctcta taattattct atttcacgaa 22200 cattttgtag atgggtacat gcagtgtgta tcttttggga ttggtaacag agcaagacag gatctcactc tgtcacccag gctggagtgc agtgtcgtga tcttggctca ttgcagcctc 22260 22320 cacctcctgg gctcaggtga tccttccacc ccagcctcct gagtagctgg gactacagac acacgccacc tcacctggct aattttttgt atttttataa tgatggggtt tcaccatttt 22380 gectaggeta gtetagaact eetgggetea agtgateeaa eegeettgge eteecaaaat 22440 gctgggagta caggcatgag ccaccacctc caccagcttt ttcattcata ctttctttga 22500 22560 agttcatcca agttgtgtgt atcaatactt cactccttcc agttgctgag tagtattcca 22620 tggcttggag gtgctagagt ttattcatca cattcaaccc attgaaggmc atttgggtgg 22680 cttccaagtt tccagttttg ggctattatg aacaaagtta ctatgaacat tcatatacaa 22740 tggatacttt ttgtatgaat gaatggaata gaatggatag gatttagtga tcagctatgt 22800 gggatgaaga gtggcataag tagtaaaaag taaccctcaa tgcaatgtgc agccagcaag

taccacaaaa	agagtttatt	ttgtttcata	catatatttc	tatatataca	tacacacact	22860
ttattaataa	ccaaatagta	tccttttcaa	atgaaaacag	taatttaaca	taaactatga	22920
acttaaaatc	taaaqtaaaa	cttgacaaca	gtgatgcaga	attttttgct	ccttagctca	22980
attaggtctg	tgttcttatc	ttatgaccag	gaagaactag	gtaccctgac	atcaaagaat	23040
gagtggcata	gaatttatta	agcaaaaagg	aaagctctca	ggaaagagtg	gggtcctgaa	23100
agcaggttgc	tggttgcccc	ttcgtagttg	aatacaaggg	cttctatata	aaacctgatg	23160
gggccgagtt	ccctattcgt	ataaggcatg	aattcctggt	ggctccaccg	ccctcccca	23220
atacatatat	gggaccttcg	tccactaggg	acatgtttag	acaagctccc	tgtgcacgtt	23280
cccttatctq	cacaaaacat	gggttggagg	ttctccgggg	accetteett	tactttetge	23340
ctaaagcaag	ctggctaact	cctttcaaca	atactaaaga	catacagaca	atggttctca	23400
gtacaatcat	tttaaatatt	taagtaaact	taaaatggtg	tttgttttga	tttgacattt	23460
taaaagatat	cgctgttcta	aaaattctgt	gtttttagtt	gtttgggctc	ctattctaca	23520
atgtgctatt	actattaagc	attcttgtat	catggcattc	ctcaaatagt	ttttaaatta	23580
cttttaattt	qaaqaaqqaa	cattctgtac	agtcacggaa	agtgtcaaaa	atgaaaatga	23640
agcaggatat	ggtggctcac	qcctgtaatc	tccgcacttt	gggaggccta	ggtgggtgga	23700
ttacttaage	ctaaqaattt	qaqaccagcc	tgggcaatat	ggtataaccc	tgtgtgtaca	23760
aaaaatacaa	aaattaqcca	gatatagtag	cccaagcctg	tagtcccagc	tacttgggaa	23820
attagggtgg	gaaatcctag	gtgacagaat	gagaccttgt	ctcaaaaaaa	aaaagaaaaa	23880
agaaaatgat	aaaggataca	tatcaggaaa	acatgcatgg	tattttgtat	catctactt	23940
agagtaattc	cagtatagtg	gtttttttgt	tgttgtttgt	tttatttttg	agaaagggtc	24000
ttacactatc	acccaggetg	gagtgcagtg	gtacgatctt	ggctcactgc	aacctccgcc	24060
taccaggttc	aaqccatcct	cccaactcag	cctccagagt	agctgggact	acaggtgtgc	24120
accaccatat	ccagataatt	ttgtattttt	tgtagagatg	ggattttgcc	atgitgeetg	24180
aatgcctggc	ctcaaqcaat	ccaccctcct	cagcctccca	aagtgctggg	attgeaggeg	24240
tgagccacca	cacccaqccc	cagtgtagtc	gttttttctt	ttctttttta	ttctatgttt	24300
taatgaattt	acacqttacc	caaatgttcc	ctagtttttc	tgccttccaa	gateacterg	24360
gaagaatatt	taaqaatata	ccaaataaga	atatgcaagt	cctcccctaa	gggtggcagg	24420
aagaacaccc	ctcccccaga	tggtatttag	cgcctctggc	tgggaacggc	tteeeeatge	24480
tcctaggtca	gggtcctctc	ttggcatgac	actaccacca	cagtgcagac	ccacaacagg	24540
gagaaggacg	gccacaqtcc	ctcaatcccc	cttttccaag	atgtgcacag	cetgaeteet	24600
aactccccac	cactgactct	aggggaaaaa	cagcacaggg	caggaaacga	ttttccatgt	24660
caccaacctt	tctctgaggg	aacctactgg	ccacctccct	cttaggacca	gcccatcgtc	24720
cacaacqtqq	aagtccagct	tccgttcaaa	tcggagttct	ttcttcatga	catttctttg	24780
caaagtcccg	gaacccacag	ctctgagact	ctggctgtcc	cccaacccac	cccatcttcc	24840
ttatcctcac	ccctqqtcaq	gagaagccaa	aacatcagtc	agcttcccag	taatcaagee	24900
taactttctc	acccagggct	cgccccagaa	caaccaccgg	cttctttcag	tgtagccaaa	24960
aggctattgg	agtettetea	aatgaaagag	attttatcaa	aggettggag	aagaaaagaa	25020
aaagaggatt	atataataaa	acgtaaaaca	acaaacatat	acacacaaac	aaaaataaac	25080
gtgagatatg	attctcccgg	agtgtttaga	gcaggaatgt	tcttgggcat	ctgccttccc	25140
ccaccagcac	ccccacaaq	qcaaggccag	ttcaccctca	gtgctcacta	etttgeagtg	25200
ttcatagaat	atttqtaata	attttaggcg	gctccctaaa	atttctttc	ELLECTER	25260 25320
tttctttaga	attacatccc	tctcggttgc	caggctggag	ttcagtggca	tgttcatage	
tcactgaagc	ctcaaattcc	tgggttcaag	tgaccctcct	acctcagccc	catgaggacc	25380 25440
taggactaca	ggtatgcacc	gctatacccg	tctatcttt	atttatttat	ttatttagag	
acagagteta	gctctgtcac	ccaggccaga	atgcagtgac	acgatctcag	ctcactgcaa	25500
cttctacctc	ccagatttaa	gggtttctct	tgcctcagcc	tccctactag	ctgggattac	25560
aggettgeac	cacctacqtc	cggctaattt	ttgtattttt	agtagagatg	tggttteace	25620
atottoocca	ggcaggtctc	gagctcctga	cctcaagtga	tccacccggc	grggeereee	25680
aaagtgctgg	gattacagge	gtgagccact	acgcccagcc	tattttattt	tataattttg	25740
ttttagacaa	gatctagete	tqttqcctgg	gctggagtgt	agtggtgcaa	. tcacgattca	25800
atacaaccet	gatctcctqq	gttcqagtga	. gccttagcct	cctgtttagc	tggtactaca	25860
ggtgcatgcc	accacctage	taattttta	. aaatttttt	. gtagagacgg	ggteteacce	25920
tagtatacaa	gctggtctca	. aactcctggg	ctccagtgat	. gctcccacat	. tggegteeca	25980
aagtgctggg	attataggag	tgaactactg	tgcccagtct	. ttttaaaaaa	ttttcaagag	26040
attagaatct	toctatatto	cccaggctgg	tctccactcc	: tggtgttaag	gateeteee	26100
acctcagcct	ccttgagtag	ctgggatgac	: attacaggca	cacactgcca	ceaetggete	26160
taaaacttct	. tctgtgccat	ttgtgcactt	. cacccaattg	cctctttgta	gtaattaatt	26220

	_					0.000
	gtgaaaaaaa					26280
	atcagttgca					26340
	catcagggaa					26400
	tgtctgtggc					26460
	cctgagttgg					26520
tgaaggctac	tgctcccaca	aggcaaccac	ggtccccgct	ctggctctca	ctgagctcca	26580
gaatcattgt	ttcctcccct	tacccaagtg	agaataatta	tgttttattc	cagaaccctg	26640
	aggcctaaaa					26700
	tttttaatgc					26760
	tattaattca					26820
	gctaacaagt					26880
	tctcagtgct					26940
	agtgaaccat					27000
	aacaaacaaa					27060
	tggcctgggt					27120
	aaggcctgtt					27180
	tataataatc					27240
	attcttttt					27300
						27360
	ttcaggttct					27420
	gggatagaac					27420
	tagcctgaag					27480
	atacattgaa					
	tagttgtctt					27600 27660
	cacttattca					
-	aaagctattt					27720
	ataaattgtg					27780
	agaattttcc					27840
	atggctgcaa					27900
	caaaaccagc					27960
	tggcatgttg					28020
	ttgaacctgg					28080
	gtgacaaagc					28140
	tttggatttt					28200
	ggacaaactt					28260
	ttccttaatt					28320
	aaatgttact					28380
	attttmccca					28440
	tcataataat					28500
	ttgtttagtc					28560
	gaagactcaa					28620
	catctggcgg					28680
	ttcccaaatg					28740
	ctgggttagg					28800
	gtagaaggtt					28860
agagtttcag	gcagtagaaa	taagagcacc	caggacaaag	ccccagggaa	gagaaacatc	28920
tgacggagga	cagaggaaga	agggtcagga	atgagactga	gcaggtgtca	tgtgtctgac	28980
accagagcct	gacacatagt	acgtagtaga	cactcagcaa	ataccgtaac	agagatgaat	29040
ccaaggctgg	gggaggtggc	tcacgcctgt	aatccccaca	ccttgagagg	cctaagtggg	29100
aggatctctt	gagtccagga	gttcgagacc	agcctgggaa	acatggtgag	accttgcctc	29160
	aaaattaaac					29220
	tgggtgagcc					29280
	gtcctacgtc					29340
	gtgctccttg					29400
	tctgtggccc					29460
	tgcacctttg					29520
	ttttttttt					29580
	taaagaccct					29640
	<del>-</del>					

gagaggttga	agaacccatc	ctgttttgcc	agtgagaagg	ggatagaatt	aaaaggatta	29700
ggagggctca	ggcatggtgg	ctccagngtg	tcatcccagc	tactcaggag	gctgaggcgg	29760
gaggatcact	tgagcccagg	agttggagac	tatagagcac	tatgattaca	cctgtgaata	29820
gccactgcac	tctagcctgg	gcaacatatc	aagaccctgt	ttctagggac	aaaaatatnn	29880
tttaataaat	ttaaaaatta	agggaaaggt	aaccacatcc	tgctacaaan	aaaagaagnt	29940
ggagaggtan	gangaggacc	aagagctaat	ggcatcattt	acacaaaaag	agatgcttta	30000
aaatcagttg	ctcatccaat	tccacaagga	caataagtaa	gaaagaggat	agaaagtcac	30060
	ggtcatcatt					30120
	gaccctggtg					30180
gccagccaat	ggcccccact	acactctgcc	ccggcctttc	tcatctcaaa	aaatggcatc	30240
	agctcaagtc					30300
	cagtcccatc					30360
aagaggmacm	attatctctt	tcctggtgat	taaaacagct	tcctaactgg	sttcccttct	30420
accttgcttt	cccatagtcc	attcttctca	ggacaacaac	agtggccttt	taaaaccagt	30480
	tgccctttgg					30540
	gactttttac					30600
	acttcttctc					30660
	ttgctctcag					30720
	tgtgccacgt					30780
	atcttgaaac					30840
	ctgaaaattg					30900
	aggccttcct					30960
	catcattccc					31020
	atatttattt					31080
	gcagagacca					31140
	aactattcca					31200
	aattttaaat					31260
	tgatctaaac					31320
	ttttgtattc					31380
	ttttgctact					31440
	agtcttgctc					31500
	ctacctccca					31560
	tgcgtgccac					31620
	tggccaggct					31680
	gttggattac					31740
	tttttttt					31800
	cagctcacag					31860
	tagccaagat					31920
	tggggtttca					31980
	ctcagcctcc					32040
	tttttaaaa					32100
	aacattttca					32160
	agctgtaatt					32220
	gagagettgg					32280
	tggaaatatt					32340
	aggaccatga					32400
	atctttatgt					32460
	ggaaatttt				_	32520
	attttcttta					32580
	gaggaaggaa					32640
	ggaaggaagg					32700
	tatattctac					32760
	tatgcatatt					32820
	ctgtggaagg					32880
	tgcaaagcag					32940
	tcgttagaga					33000
	cctagctggt					33060
J J		5	- 3 1 3 0 0.		5 5	

```
ggaccactgt cattgtatcc tggagctggt tctatataag acacagcctg agcagtatat
                                                                     33120
 aggetteeta gtetgeteet ggeeaaatgt eeeagttgga ageeeagagg ttgtetgget
                                                                     33180
 atgccagtgg caggatgggc aagtctaact caagggtgac atattagcaa gacctttatg
                                                                     33240
 gccatgcatc taagatgctc tgtccaagcc tgaacttagc aacaataaac ctgacatttt
                                                                     33300
 gaaatccatc tgattcctct attttccagt tgatgccaca tgcatcctct tgccatcttt
                                                                     33360
 cttaattaag atgactttgc ttctaaatct ccttaattat caagcagcta tctacaatat
                                                                     33420
 tttgtaatcc ccttaaatct tgagcataat gatgtcataa ttatgaaagt gmccggwttc
                                                                     33480
 acatgaagta ttgcttaatc ttaagaacaa aatggcagct gtgaaaacag atgaagtaat
                                                                     33540
 tagaggaaga gcctttttgg aagcttcgag atattttcaa agtaattagt actagttagc
                                                                     33600
 aataaagtto tgttotgaga aattgotott aaaggaggaa catggattaa agaaaaaaat
                                                                     33660
 ctgctactag gaagtaagcc atcttcctat gtgtgtgatt ggttttgctt cctgaaaact
                                                                     33720
 ggttccgttt tcaacaaaat ttgggtctgt tgaaaaagaa cacgcagatg ccagccttga
                                                                     33780
 tgtcaaacgg gcccaaactt ggacagtggt aaactaatga gcaatggtgc acagagtcag
                                                                     33840
 ggtaaaagct ggacaatttc ctatgaccaa cttttccagg actctgctct gctcttcctg
                                                                     33900
 agaaaaatac ccaaagtgct gcctcttcca ttggcccaac catgcatctt tcaggatagg
                                                                    33960
 mcacatctgt ttataggtgt ggattgtagt tgctcataag tgacattagg ctgtttaaaa
                                                                    34020
 taataatagt tcgagttttg ctatgagctg atctgttttc caagagagct aagagttttc
                                                                    34080
 cagctaaaag agggaattag tgggtaatca aggcagctga catggggtgt ggctgggcct
                                                                    34140
 tgaatgtgtg tcactctctg tgcccaggca gagcaaagat aaactccaga ctgcatgttg
                                                                    34200
 ctcagagacc aggaccaacg tcatagggcg cctaaaaggc aggtggccca gttcagaatt
                                                                    34260
 gtcaaggtct gacctgcttg gacaagtgct gagtacatag taaggatgga ttggctagtc
                                                                    34320
 tctcaaaact tgcaaacagg gcgcaggtga tcttgagatt tcaggtgccg gagagaccca
                                                                    34380
 tcgtgtagat tccagagttg gctatcatga ctaacagctg tctaagttgt ttttaaatga
                                                                    34440
atcattaagg gctacatttt cagttcagct aatcaagtag caaattacgg tgggtctaaa
                                                                    34500
atacttatct attgcattat gtatatgcta gactttatca ctttagttgg ttatatcgct
                                                                    34560
tcatatacta acagtcaaaa aatgccaaac gagaaaacaa acaaacaaaa atgccacatg
                                                                    34620
actgtgtaaa tacacttttc aaactgtttt atctaagagt ttactcactt tcacattgtg
                                                                    34680
gcttatagta ttttcaatct aagagactaa ttttgcttac ataggaaact acatatttta
                                                                    34740
aattgaaaat taaaaaaata tttttaaggt tttaatgagt cctatcaaaa cacatttgta
                                                                    34800
tataggaagg tagcccaagg tcactgttgc caattgtgta cacagcctgc cctmtagtgt
                                                                    34860
tttcttctaa acagcaccaa attttagatc atagttgtaa atctcaaaat gttgggttaa
                                                                    34920
taggattaaa cactgtgtca tcaaattgat aggacacagc taaatccctg acacggatga
                                                                    34980
aaattaaagc agagaaaaac gaaggtcctt ccagaagctg gtggcaactt cactggggag
                                                                    35040
35100
atgatagaag aagagttagt tgaaatgatg tatgtaaaat gtgataactg cataattact
                                                                    35160
agtacagttg ctagtttacg actgtattaa aaagacattc caaatgttga tcaaataatg
                                                                    35220
gaggtttctg tggttgtttt ctttttaaaa tagtaaatat acgtaaagca gataaatatc
                                                                    35280
ccctttgtgg gagttaaaat aatctaactt attttatagt tttaacttta ttaaagcata
                                                                    35340
cgactattct aacttattta acttttctta gtaaagtttt aacctctgta tttagaatat
                                                                    35400
ttgtaactaa tgtgtatcga attaaactca aagggaaatt cattaactga gaagaaaaa
                                                                    35460
ttttaactgt gcactattca catagcataa tgggttttat aaggagtatg agaaaaatgt
                                                                    35520
gtgtggttgg ttttgctttc tttaaaaata atagcgaacc acgtaggtaa aaactcactt
                                                                    35580
gagaacatag acttttggag ggaaatgcca ggtgtggtgg ctcacgcctg taatcccagc
                                                                    35640
actttgggag gccgaggggg gcggatcacc tgaggtcagt agttcgagac cagcctgacc
                                                                    35700
cacatggaga aactccatct ctactaaaaa tacaaaatta accgggcttg gtggcgcatg
                                                                    35760
cctataatcc cagctacttg ggaaggctga ggcaggagaa tcacttgaac ctgggaggtg
                                                                    35820
gaggttgcgg tgggccgaga tcacgccatt gcactccagc ctgggcaaca agagcaaaac
                                                                    35880
tccgtctcaa aaaaaaaaaa aaaaaaaaag aattttggag ggaaaaaaat ccctctaaca
                                                                    35940
gattcgaatt aattctgtgt ttcgagatgt ttacaaaatg aagcttggac tctgagagga
                                                                    36000
tgtgatctat cctctccatt gcattgagtt tcaagtactt cacatggcgg gcttttttaa
                                                                    36060
ctgtcgtgaa gtttaaacca aatagggact agaatttgtt tgttttttta acttacattt
                                                                    36120
caagctteet tatgteteag geacattage ataagttgte taaagteata aggaaaaatt
                                                                    36180
gacagaaaaa tgctttggag ccccaggtgt tttcaattga tgccaacaga aactaaccaa
                                                                   36240
atggaagaca tttgatgcgg gtttattttt cctttgcagt aacagcggga acatgaagcc
                                                                   36300
gccactcttg gtgtttattg tgtgtctgct gtggttgaaa gacagtcact gcgcacccac
                                                                   36360
ttggaaggac aaaactgcta tcagtgaaaa cctgaagagt acgtttggtt tcttacctgt
                                                                   36420
gctgtgtcct gtttgcatgt tggttgtcct gctggcgttt atagtgagtc gcagttgaga
                                                                   36480
```

gataaccata ttcgctgttt tcacggtgaa acgttctcaa ggcgcttaaa ccaggtcatc 36540 ctgacgccaa acatctgggt aaaaatagaa aattccaatc acgtctctgc aggcgttcac 36600 ctttccagat gtttgtatca tgtagataca acttgccagt tttttcactg catttttttg 36660 tatcatccag atggttggtg tcatctcagc acagctctaa tgaacagtga aatacttttc 36720 tagcatttga aaaatttaaa ccattagagt aatctgtgca attgttctta aactagtgaa 36780 agaatgggtt ataattacgt tgaatctggt tgttctgtgg ccattaactt gcaactttgc 36840 36900 ttggtgatat atactttggg tacttaatat atagaagaac aaattagcta aaatgcagct gatttggggt ctgtaataat cagagtcaag aatgagctcc tcagtaggcc acgttggcta 36960 ttttgaacag ggaatgacaa tgaattttaa acttactaag ggcttattaa aggtgtataa 37020 37080 gacacgtcca ttgagttatt aaggaagctc gtattacatg ggatactttc taggtctcgt gcctccttat taggtaactg aagctgaaag aaagagaaat tgctgactgt gtttgaggtc 37140 37200 cccagctggg cacttaatat aaattatgaa gaaaatgcaa aattttctct aatataaaca 37260 cacttgagtc ttaaatgaaa gaaaaaaaat ggataaatga aaacagggcc tgagcaagtg acaagaatga ggttcagtga actctatttg tttaggcgct cacaagtgag gagtagaagg 37320 tatggtccgt gtggcagctg tgtccatgtg gcagctgaca gctaattcat tatgatctgc 37380 tttcagaata tgagcctata agagaacaat taagcctctc ttttggagac atgaaaggtt 37440 37500 ggtgaacttg gtgttttgta atctgatcag atctcaaaga aaaaattgcc acatgtcttt taggtttttc tgaggtgggg gagatagatg cagatgaaga ggtgaagaag gctttgactg 37560 37620 gtattaagca aatgaaaatc atgatggaaa gaaaagagaa ggaacacacc aatctaatga gcaccctgaa gaaatgcaga gaagaaaagc aggtacagtc attgaaaata atgtctgttc 37680 ttacacagat ctggaccaga aatactgcac ttgttagtgc gattgatgaa ttacttattt 37740 tccttagtaa taaatttcat gggtagctgc ttttatttga ggaaaagttt aagggaagct 37800 37860 tcagatttcc ttgaagaaca tatttcgtgt aggataggct tctgcaagac tccaacccgg aatctggggg attcatctct gtttaagtgc tgctttctca aaaatagatt attcttggtc 37920 37980 tcttctgagt taggatattg agtcaaaagt atttgaagag ttttttttt tactagatca 38040 qtqqtctcca qaqtttttgt tttttgtttt ttgtttgttt ctgtttttga gacagagtct 38100 cgctctgtca cccaggctgg agttgatccc gctcattgca acctccacct cctgggttca 38160 ggtgattctc ctgtctcagc ctccctagta gctgggatta caggctccta ccaccacgcc 38220 tggctaattt ttgtattttt agaagagacg gggtttcacc atgctggcca ggctggtccc 38280 gaactetggg geteaagtga tecacetgee teageeteee aaagtgetgg aattacagge atggaccacc gtgcctggcc cagagatttt tggtctctca ttcctatgac taaaaaattt 38340 38400 gttaccactc actcctaaat atatgcatat tcatttactc atgaattaga tacatgaatt 38460 gctaccattg atatctcaag gcacaatatg tatttaaggt gagattcatc attagcgagt 38520 gtggatataa gtccacattt caaataatct tctagatatt ttgaaacttt tagccgactt gccagatctg attagatcac catagttttc ccttgtcact tggccaataa agagctcata 38580 38640 atgatcaagt gtcagctctg ccatttgctt ttggtccgct tgagcttaaa ttattcattt 38700 ttaaaatctg ccaagttttt tttttttca aagaatcttg ttaagcctcc tgtccattta 38760 gtgaaggtta ctttagttaa aactagataa taaaatccat cagtctacct gagttctctt acatggcaac tcattacaat tgggtgcatg tgaacagagc aagggaacta tagttgattc 38820 ttctggaatg tagaggatcc ccttttcccc aaggtcatca catacagttg ggcacacaca 38880 38940 gtatctgaca tatgcatctc aagagagtac catgtatatc caataatgca tcagcctaat cactttttca aattcaaata gctttattta acagctatag cttgaactac atattttatc 39000 39060 catggagaat acatattata ttcaaatgtc tttggaagat gtaaaaaatt gttcatatgc 39120 cacagtataa agttcagtaa atttctaaat tatagacatt gaatagcttg cagtttaatg 39180 acattaataa ttaacatcac actcaaaaca atgacttttt taaaaaaaggt tatcttcaam cattmccctt aaatcaaaga ggaaattaaa actgtaacaa aaataatttg gaaaatattt 39240 39300 tcaattttaa tgttgagagt aaattacttt ttaaatktat ttttattttt tgaaaaatgt 39360 taagttgtaa aatacatata acaaaattta ccatcataac catttttaag tgtaacgttc 39420 agtagtgtta aatacattca tactgttgtg caaccaatct ccagaattat tttcatcttg 39480 caaaaactga aagtctatac atattaaaca atgccccatt ccccccaccc cagtcagatt tttaatttaa aaatacaagt ggaagttcta atattttcta tctatccctc tatctataaa 39540 39600 gttgggggcc actgaattcc agattgctgc ttgcatcttt ttacttctga gcatcatggc 39660 ctctgggagt ccgttaagca actggagccg ggtagtgtga caggctgacc ccaaagctgt gtgtcagcgt caccggactg gttgatgttg cagcctcacc tactgccctg agtcagtcag 39720 39780 ggttctggca aggaaaggag aatgcctgac cagcagctgc aaacccttct cccttttggc agcaatcaaa agattttgag gaaatctaaa atagctcctc atcaggaaaa tgtggaagcc 39840 cctccagctg ggatcttccc tggtgggctt gtgagcctgg ccatctggga atagagacac 39900

tagatagcac tcatacactc ttcacaaaac acattatcac atggaatgtt ttgaacatct 39960 gggtaaacca ctactttcat tttatagcta agaaaactgg ggtttgagat gtttgttaat 40020 taacatgtta ctccaacact gtaatgaatg aactgagata aagtcagcag atgtgtgcac 40080 gggggaccca gtgattttct gcttttctca cttccctgaa cctcctggca aggaggacag 40140 ggtatacage tttaacaaga atattecact ttgggtgggt caagtaagca aatgtggatt 40200 tcacttctgg ccctgaagaa tccaagcaac tagtagaatt tttgtttatt cttaaaaatc 40260 ttattgtaca aaaattcatt gaattatact cttaagtttg aggcactcaa ttagaaagtt 40320 aatcggaaaa aaaaaatctg tttaaccctg agtatccctc cctaaaatta cttaaagcct 40380 agaataaagg tcagtttaga caaattatga attggcaaat atggtgttag caaccctagt 40440 ctcccagtat tgagccccac ccattctcaa gagtactgct cagtggtgac ccagcatcct 40500 cactgtcccc ttcctccacc cctccttatt aatatttagt gagactatct gaaacttatt 40560 aagtaggaaa ccctagagaa ggttagagtg acttgacctc caaatcaggt tttatttgta 40620 tgtgttttta atgaaatggg gtcttgctat gttgctcagg ctggtcttga actcctgggc 40680 teaagggate etectgeete actteeegag tagetgggat cacaggeact agecaceatg 40740 cctggctcaa tgccaggtta atatagcgct tttgataaac tgtcaactat aggaatagag 40800 ttataagcgt gaatctgcca gttggtacaa tgtctagcag gaaacggaag gcgtcgatag 40860 gatatteett aggaatgttt actagacaga ggtetaette tteeatggea atgttteaet 40920 tccaaaactt gggacctgtg atttggtaac tgttttttgt cctgcttctg ggcagtgaat 40980 ggaaggaagc ctgagagata ctagttatta tactggacta gttataataa cagatgtctt 41040 gcctatgata atggatacta ggtataataa tagatgcctt gcttgtttag ctcatttaat 41100 gcaaagacct tgagaagtag atactattat tcctattatt cttatttgca aatgaggaga 41160 ctaaggetta tatgtattaa gtaatttgcc caagggtaca cagccactgt agtttggaat 41220 tgggaatatt aggattttgg cttatgagga caatgagcag aatatgtaaa attgggactg 41280 attgagaaaa teetggaggt attgttaett geettggaga aacaaetttt ttttttttt 41340 tttgagacag agtcttactc ttgttgccca ggctaaagga caatggcacg atcttggctc 41400 actgcaacct ccgcctcctg ggttcaagcg attctcctgc ttcagcctct gaagtggctg 41460 ggattacagg cacccaccat catgaccagc taatttttgt atttctagca gagacagggt 41520 tttactatgt tggccaggct gttctcaaac tcctgacatc aggtgatcca cccgcctcca 41580 gcctcccaaa atgctggaat tacagtgttg agccactgca ccctgccgaa aaacaaccac 41640 tttaagatgt tagattccag ccaagtgaag tggctcatgc ctgcaatccc aagcactttg 41700 ggaggtcaac ctgggcagat cacttgaggc caggagttcg agntcagcct gggnaaantg 41760 gtgnaactcc gtctctanta naacatacaa aaattngccc ggcatggtgg cacgcacctg 41820 tactcccagc tactggggag gctgaggcag gagaatctct taaacctggg agatggaggt 41880 tgcagtgagc tgagattgca ccactgcact ccagcctggg cgacacagcc agactctgtc 41940 tcaaaaaaaa aaaaaaaaaa aaaagatgta agattccaaa attgttctac aaagtscaag 42000 gacacacaca cacteetgte tgggteaaaa tgtatattgg caagetgggg eeetggeagt 42060 tttcttacgt ggatcatagc aaatgctacg tggcttagca gccaaacttt acaatgagga 42120 caackgacaa atcctagcca ggcagagaag atgtggaaga ttgtcagtgc ccaggtgatt 42180 ctttgggctt aatactccag gaaagggtca tttccattag ctctgaggct gtcttcttat 42240 ggccagatcc actatactca cttcattccc ctgcacgata tctcggcatg gagggggctg 42300 gggttcagaa gtccacactt gcagggaagc cagaggtttg ggcaggggca caggaagaaa 42360 ggtctgttgc accatggtgc tgacccgtga ggcactccag gggcagggct gaggctcgca 42420 gggacaggtg ccactgctgc tgggctcctc accacccaga gcaggacttg gccaagtaca 42480 42540 gcaagcacca caagggggag cactgggaat ataaacaaga agaacaaagc ttgtttatat 42600 aattgcagag atgccatcct gcgtctcggc aattacaatg taactcaacg ggaacattta 42660 acttgacata caagaattgt actttcttgc aatgtttaag gatatacaac aattaaagac 42720 agcataaatg aaagaattaa aatgtaccag ctttataaac tgtaaagccc actttcccca 42780 tgcaccagtg gatgagaatt gaagacagac ttaccggtaa ataggtaaat cacagttgtt 42840 cccagatcgg gatggcatct tcattgtcag gtcacccaca cctagagtaa tgtctgtcac 42900 atagcaaaca ctcagtaaat acttagtgaa caaatgaatg aacagatgaa taagatttac 42960 agtetteaat aggaateaat eagtgetett ttettaaaet aaacagaaag etttggggag 43020 atctgacagc tgcgaggcac ctgaaggaga aagaatgaaa aagcagttta gaatgtgtac 43080 atttcaaagg gtgaaatcaa ctaaggtgca catagatcat gaaatggaaa ttggactttt 43140 gtttctactt ttaactagga ggccctgaaa cttctgaatg aagttcaaga acatctggag 43200 gaagaagaaa ggctatgccg ggagtctttg gcagattcct ggggtgaatg caggtcttgc 43260 ctggaaaata actgcatgag aatttataca acctgccaac ctagctggtc ctctgtgaaa 43320

					ctatttcagc	43380
					gataggggcc	43440
					tacgcaattt	43500
					ctggctttct	43560
					tgagggcagg	43620
	tatttgtctt					43680
					tttccttctg	43740
	atttaaagat					43800
					ttcatgtccc	43860
					tttggttatc	43920
					gccccactaa	43980
cggctccaat	taagctagat	ttttctcccc	cttcaagaag	tgagctgaat	acaaaattga	44040
gtggaatttc	acgctccata	ttagagcaca	tactaattag	ggtatgctcc	tggcttggca	44100
atgccatact	caattacaaa	gggagcaact	actaagataa	tgaatgcgcc	aagttaattt	44160
gcctccacta	ttaattgcat	ctgctctatt	tttagagcta	ctgtcgcctg	ctaatacacc	44220
agaatatggt	gtaatcagca	ccagcaggaa	gtcaggagat	atggggacca	ttcccatctg	44280
ggtcagttgt	gtgatcttat	gaacatttct	tggggcttta	aaggtttgtt	tttgtggatg	44340
aagagtcaag	taaacagaag	ctggtagagg	gagaggcaga	caatccaccc	aaattctttt	44400
ctttatttt	tttcatgaga	cagggtctgg	ctcttttgcc	ctggctagag	ggcagtggtg	44460
ccatcttggc	ttactgcagc	ctccacctcc	tgggttcaag	tgattctcct	gcctcagcct	44520
cctgagtagc	tgggattaca	ggcgcccacc	accacgccta	gctaattttt	gtatttttag	44580
tagagacagg	gttttaccat	gttggccagg	ctggtgacct	caggtgatcc	acacaccttg	44640
gcctcccaaa	gtgaaaactt	gaccttttta	ggctattggt	gggcaatgta	aaccaggaga	44700
aatttcagat	cctgtttcca	taggcaaagg	caaagtcagg	tataagaggg	ttaagaaatt	44760
atcttaaagt	taattgcctc	atactagctt	gcccagaatt	attattgatt	tgaaatgact	44820
actgtaagtt	gactttaaaa	tttgcaataa	gaaatggtcc	agggccgggt	gcagtggctc	44880
acccctgtta	tccctagcac	tttgggaggc	ctaggcatgt	ggattmcctg	agctcaggag	44940
ttcgagacca	gcctgggcaa	cacggtaaaa	ccctgtctgt	actaaaatac	aaaaaaaatt	45000
agccaggcat	ggcggtgtgc	aactgtaatc	ccagctactc	ggaaggctga	gacagaagaa	45060
tcacttgaac	ccaggaggcg	gaggttgcag	tgagccgaga	tggtgccatt	gcactccagc	45120
ctgagtgaca	gagcaagact	ccatctcaaa	taagaaagaa	agaaagaaag	agagagagag	45180
agagaaagaa	agagaaagaa	agaaagaaag	aaagaaagaa	agaaagaaag	aaagaaagaa	45240
agaaagaaag	aaagraagra	agaaagaaag	aaagaaagaa	agaaagaaag	agagaaaaga	45300
agaaagagaa	agaaagaaaa	gaaaaagaga	aagaaagagt	tgagaaagaa	aataatttt	45360
tattccattt	ctgtccccta	ctctactcca	cagattgaac	ggtttttcag	gaagatatat	45420
caatttctat	ttcctttcca	tgaagataat	gaaaaagatc	tccccatcag	tgaaaagctc	45480
	atgcacaatt					45540
	tctttaacag					45600
cagacttttc	aatcacattt	catatcagat	acagacctaa	ctgagcctta	cttttttcca	45660
	aagagccgat					45720
ttcttccagc	tgttttgtaa	tttcagtgtc	tctatttatg	aaagtgtcag	tgaaacaatt	45780
actaagatgc	tgaaggcaat	agaagattta	ccaaaacaag	acaaaggcaa	gtattaaaag	45840
attactttta	cttagaggtt	tacactaaag	tcaagttttg	tttagcttca	gaaatggtag	45900
acatttctga	gtcacattgt	atagcgtttc	ttgaagagac	aatttatgga	aaatgtttca	45960
gagcctctta	aaagaagctt	tgaagtctgc	taaacactat	ccctcttcca	tcatcgttga	46020
gaactgaact	ctttctagag	caaattttca	aagcagaaag	aaaaaatgct	aataggttga	46080
gaacttgaaa	aaaaaaacc	agttccctca	tttattattt	ctttatttat	tttattttgt	46140
gacggagtct	cactctgcca	cccagcctgg	agtacagtgg	tgtgatcttg	gctcactgca	46200
	cccaggttca					46260
	ccaccacgcc					46320
	ccaagctggt					46380
	tgggattgca					46440
	agatgctcag					46500
	ctcaactccc					46560
	tctgaatcac					46620
	ctcataaacc					46680
	tgcctcatgg					46740
		-		- <del>-</del>	- 55	

```
cggcagatat cttctgtggg cttctatgga gtaagttaga taccgcattc gagaatgaga
                                                                     46800
 attgccacga gggtcaagtg taggatctgc atttcctttg tcactgtatt gacccctaag
                                                                     46860
 ccaggttgaa ggctgctccc ctctgagatg aaaaataaaa tgggctcctt ctatctattt
                                                                     46920
 ttctttttct ttttttttttt tgagatggag tgttgctctg ttgtccaggc
                                                                     46980
 tgtattggtg tgatctcggc tcactgcaac ctctgcctcc tgggttcaat caattctcct
                                                                     47040
 gcctcagctt cccgagtagt ggggattaca ggtgcccgcc accacgcctg gctaattttt
                                                                     47100
 gtatttttag tagagacagg ggtttcacca tgttggccag gctggtctcg aactcctgac
                                                                     47160
 ctcaagtgat ctgctcacct tggcttccca aagtgctgga attacaagca tgagccacca
                                                                     47220
 cacccagcca gccaccacac ccagccagcc accactcctg accctatctg actattttc
                                                                     47280
aattatatta gctgtagctg gcaacatctg aatcagattc tcaaaatcgc catgacatta
                                                                     47340
cataactggc ctctacatag gagaggttta cctttcagaa actgaagcta ggaaacagtg
                                                                     47400
cattacatcc ttcaggtgcc atcgttccat gaacagagaa cagccatcat tactggaatt
                                                                     47460
gttgggttct atttcagagt ccagtggact ttttttataa gtcaattatt tggtctggta
                                                                     47520
gtccattctg aggttgcaaa ttcatcaaat attcaggata aacaccaggc gagtagacta
                                                                     47580
aatctatcca ggctgggtgg tattaagtga ttttagcctg actgtttaca tggatatcaa
                                                                     47640
ctgtcttgga ataacactga gaatatgttc attagaacaa aagggctcct cccctccatg
                                                                     47700
ttgtgtagca gccttacaca agcattggtt acattcccat gtgcacagga ctgtcagtag
                                                                     47760
tgattcagac atgccacaat ctagataatt tttcaaccac tgtaaccccc tcccacacac
                                                                     47820
cagctacgaa cataggtttc cactgtctgc caccattgcc ttctcattca cacagctggg
                                                                     47880
ggccagccct actctcagct gcctcacacg caccctcccc agcccctctg cgccacttcc
                                                                     47940
atctcagtga tgacctggaa agccaaggtc ccctgtgaat gcaaatagta aagacaaaaa
                                                                     48000
caaaatagca accaaaaaag totgtgttac actattgtac tottotttot ccagtatocc
                                                                     48060
tecectagee agacagtaca cagaagetae egeagaggag acaetgtett eccagatgag
                                                                     48120
caaatgtgga ctgtttatca agaatagtca ggcaggcgct ctacagcact tgaatgtggt
                                                                     48180
ttccatcact tttctggaca ggtagttggt gaggaataag cctactgccc ctagaaaatc
                                                                     48240
tgcctaatga cttgacactt tgagttttgc cccttgtggt aggcaaaata atgactgccc
                                                                     48300
acaatateee caccetaate eccagaacet gtgaatttat gttatgegge aaagggaaag
                                                                     48360
taaggatgca gatggaaatc aatttgttaa tcaactgact ttattttat ttatttattt
                                                                     48420
tttgagacag agtcttgctc tgtcacccag gctggagtgc agtggaatga tcttggctca
                                                                     48480
ctgcaacctc cacctccggg gtttaagtga ttctcctgcc tcagcctccc gagtagctgt
                                                                     48540
gattacaggc actcaccacc atacctggct aatttttgta ttttgagtag aggcagggtt
                                                                     48600
togocatgtt gtocaggotg gtotogaact totgacotca aatgatocgo coacotoggo
                                                                     48660
ctcccaaagt gctgggatta caggcatgag ccatcatgcc cggcctcaac tgattttaaa
                                                                     48720
atagagagag tatgctggat tatccagatg gattcaatgt aatcacaggg tccttaaaag
                                                                     48780
tggaagaagg aggcagaaaa gaattaatag tagcagccac aagagaagga cttggctcga
                                                                     48840
ctttgacgac cttgaagaca gaggaagggg ccaggagccg agtaatgtag gtggcctcga
                                                                     48900
ggaactggaa atggtataga aatgaattct cctctagagc ctccgcaaaa aactagccct
                                                                     48960
actgacatct ttttttttt tttttttt ttttttttt gagacagagt ctcgctctgt
                                                                     49020
cttcaggctg gagtgcagtg gtgcgatctt ggctcagtac aacctccgcc tcctaggttc
                                                                     49080
aagcgattet tetgeeteag ceacetgagt agetgggaet acaggeaegt gecaceaege
                                                                     49140
ccagctaatt tttgcatttt ttttttttg agacagatga catcttgatt ttagcctagg
                                                                    49200
gagacccact tcagacttct gacctaaaag accaaacaat aatgaatttg tgctgtttca
                                                                    49260
agccactgaa tctgtggtag ctgtagcaga gctaataata atagtaactg accaacattt
                                                                    49320
actgagcaag ttccgtgtgg caacettcat ggatgggcct tattggtcat gattgtttaa
                                                                    49380
agggccaaaa ttagaaaaat agctaacact gaattatgaa caccaggaaa aggagagcgg
                                                                    49440
aaataaaaag aatcagaaat atcttgataa ttaatgctat ttttgttgag tataggttca
                                                                    49500
ttttgttctc atatttcttt cctaccttgg tctttctgga cctcagttcc tgaatctgtt
                                                                    49560
gaaagcgaat aggtccagga aagtagctct tggaattatc ttcatttgcc ttatgaatcc
                                                                    49620
ctggaaggaa cagatgagat tgagttctac tgtagcttga cccgtgcggg ggccgggaga
                                                                    49680
cctggttcta atgctgcctt agagagtgtt agttaacatt aattttcgcg tgggagaaac
                                                                    49740
agacaggcag gtgggagagt agatgattta gctcagtgac tgcactggaa gtagctccct
                                                                    49800
ggaagggttc tgaggttctg tcaaggctag actaagcgag gtgatggatt gtgctgtggc
                                                                    49860
tgcaggatgg ggaattagtg tcatatgggc ctagaatttg tcatccttgg tgtacatacc
                                                                    49920
aggtattaat ctagatgcta gagataaaat gatgattatg acacagcctc tgacttccag
                                                                    49980
gageteagte cagagaaagg aaaacagatt agtgaacaat tacateacea tattgtgggt
                                                                    50040
aaaatggcag aagaaggtat ggaagaatga caagattaaa atggcaagac caagtccctt
                                                                    50100
ccctcaagag gcttacagtc taatggaaaa gataagaaag caaacactac ataaagcagg
                                                                    50160
```

aattaattct	acactggaaa	ttctcacagg	gggctataca	gggcaaagaa	gagggtccag	50220
gaaagcagct	gggagaaact	gactttctgg	tcaccaaagg	ggatgggtgc	cttacatgcc	50280
attctatcaa	acagtgcttc	actgttttta	aactatggac	tttgcaattt	atctcaaaat	50340
aaaacgtttc	atttttaaat	gctgaggatt	taatatgaca	gaaaatcatc	aggttgtaaa	50400
ttagtaatac	atgtttccta	atgtcaaaca	ctctattggg	aaccgccaat	tttctgttgg	50460
atagacttct	cttttacaca	tttttatatg	gattgttaat	tctcctaggg	gaaaaaactt	50520
		agatattttc				50580
		atactcgcac				50640
		atatatgaga				50700
		aaacagacat				50760
		ttaaagagtt				50820
		ttacttaatc				50880
		atcaaatata				50940
		tcttctaaaa	-			51000
		gcattaatat				51060
		aagagtgtgc				51120
		atttctgtgt				51180
		gcactttggg				51240
		ggacaacatg				51300
		tctcacctgt				51360
		ggcagaggtt				51420
		actctgtctc				51480
		agcactggta				51540
		acactaacgt				51600
		gatgttacct				51660
		tttcaaattt				51720
		gctattttgt				51780
		gccacaaaag				51840
		tacttctata				51900
		ggaggggaag				51960
		ctattggcta				52020
		gtgacgaggt				52080
		atcagggcgg				52140
		gggtggagcg				52200
		gcaaagaatt				52260
		aacaatttt				52320
		catagtggat				52380
		gcgttcaatg				52440
		gctctgttgc				52500
		ttcaagcaat				52560
_		cgcccggcta	_			52620
		ctggtctcga				52680
		acaggcatga				52740
		attctttcac				52800
		aaacactatt				52860
		ccgcaagcaa				52920
		gtgtttagac				52980
		taatgaacta		· ·		53040
		cttttccctc				53100
		cctcccctca				53160
		caaattacaa				53220
		tctcactaaa				53280
		aattggaaga				53340
		gagatttggg				53400
	· ·	gacccaagat				53460
		tctggcacca				53520
		cacgtttggg				53520
	222222					

gegeteaace tagaceettt geatgeacag tteacaatag ggtttgtget eeegtgagaa 53640 tggaatgcct ccgctgatct gacagcaggc ggggctcagg cagtcatgct tgctcacctg 53700 ccgctcacct cctgctgtac agctccgttc ctaagaggct acaggctgat atgggtccgt 53760 ggcccagggg ttggggaccc ctgctataaa ggaagttcag aaaaatcaga ttataattct 53820 gatttttata aatcagaatt tataaaattc agattataat ttactaccaa gtaatagctc 53880 ttttgccctt aacttcccac agtgaagacc actggagtaa tttatatcaa cgcaaagaac 53940 aaaaagcatg gtcagtggaa actcctgccc ctcccttggc tttctctcct caatctaaca 54000 gtgagcaagt tgcaacaaat cgcgccgttc agagaaaagg gaggatggaa ttgttacaac 54060 54120 cgtttctgtc gcccaggctg gagtgcagtg gcgcgatctt cgctcactga aacctctacc 54180 tectgagtte aagegattet getgeeteag eeteetgagt agetgggatt acaggeaege gccaccatac ctggctgatt tttgtatttt tagtagagat ggggtttcac catattggcc 54240 54300 aggetggtet egaacteetg acetegkgat eeteecacet eageeteeca aagegetggg 54360 attacaggtg tgagccatcg cgcctggcca acaaattgtt acaatgttaa acaacataat atcctaaaca tattggcttt taaagtatca ttagatacac cacaatacta ataaaggtta 54420 cctttgggtt ttaagattaa agatgatttt taaaaatact tctttctgta ttttccaaac 54480 54540 tcttaaccat aaacataaga tattccttga cttaggatag gattatgtca caacccatca taagtttgaa aaatcataag ttgaaccatt gtaaattggg gaccatatgt acatgtatgc 54600 atatatgata ttaaaaatta ttagacgtct ttaaaatttg actttttaac atattacttt 54660 tatttaatca ccttgctcaa ggagcctgta aattacatat taatattctc cattatgaaa 54720 54780 taagtottto cattgtgcaa attaatgcat tgcagaggtt ctaaacatct atatgctttg caactcgaaa ggagtaagtt tccctttcta atttttttat tcaattaaat aaaaaaatga 54840 gtttaataga gtctattaaa ttagatcatt attcggagtg gttagtaaac ctgtttagag 54900 tegacaacae tecetttete tettttttt tttttttt tttgtgeeag agtetegete 54960 55020 tgtcgccgag gctggagtgc aatggcacga tctcggctca ctgcaacctc cacttcccag 55080 gttcaagtga ttctcctgcc tcagcctctc gagtagctgg gattacaggc aaccgccacc 55140 atgcccagct actttgttgt atttttagta gagatggggt ttcaccatgt tggttaggct ggtggcgaac tectgacete aagtgatttg cetgeetetg eeteccaaag tgetgggatt 55200 acaggcgtga gccaccatgc ccagcccctt tctccttttt aaatatcacc agcctgggtt 55260 55320 ctttgttctt tttgttttgt ttygtttttg tttttgtttt ttttgagacg gagtcttgct 55380 ccgtngccca ggctggaggg cagtggcaca atcttggctc agtgcaacct ccgccttctg ggttcatgcc attctcctgc ctcagcctcc tgagtagctg ggactacagg cgcccgccac 55440 55500 catgcccggc taaatttttg tatttttagt agagacgggg tttcaccgtg ttagccagga tggtctcgat ctcctgacct tgtgatccac ctgcctcggc ctcccaaagt cctgggatta 55560 caggettgag ccaccatece tggeetecag cetgggttet tattgaeact gaatteteaa 55620 55680 gttagttggg ctagtgagga agtcaggtta cacgggccac agaacaagaa caaggattgt 55740 tetttetete tetettecae tteattetet gteageetet eeegaeetea gtagttggte ttttctcccc cttcttttga aagcagagtc cattatacaa atggacttgt ttacttctcc 55800 55860 acatecetet tgtgcaaatt ttetgecatg gacaceteta ecceacetta gaatgtatat 55920 tagacaattt tgacatctag aatgtcttgt tgggcagaaa agcgtttgga aagcgttgct 55980 ccaggtagct ctgattacaa actggacctt ttcgcggggt tacctagagc agttgagagt 56040 gctctttctc ctggccaggt gcagttgctc atggctgtaa tcccagcact ctggaaggcc 56100 gaggcgggcg gatcacctgc ggtcaggagt ttgagaccag cctggccaac atggcgaaac cccgttctac taaaaataca aaaattagcc agatatggtg gtatgaacct gtaatcccag 56160 56220 ctactcagga ggctgaggca agagaattgc ttgaacctgg gaggcagagg ttgcagtgag ctgagatcaa gcctccagcc tgggcctcag agcgagactc tgtcttgaaa aaataataat 56280 aataataaac agataaataa aatttaaaaa aataaaaaag gagtgctctc tctcctgaac 56340 56400 tgctgactcg aggactctct cagcctgttt tatcatttgg aagaggaaat aatatatctg cttcgtacac atctttagaa gtttaaataa aatgtctgaa atatcaatga ttctcattat 56460 tcaaatattt gttttttaag tcacagttgc aaggttatat acagaagcat aggtttttat 56520 aacagaaaaa tagacactta atatactgac ctcttacaaa aatagtcctg ctcaagcatc 56580 56640 ccatctatgt atcattamca tctatttctt tctacccagc taaaatagtt tattaataat 56700 ccttgaatgt cacaagtnga atacagaata aatcagataa tacattaaaa tgcacctgat aatcaatatg caccagataa tggacacagt atacatcaga taatacagta caaattcaat 56760 56820 gaaagtttag tgttgcaaag gtaaaatgta aagaatgtcc taatgtgctc ccatgctgct taaaactgtt attataaatt gctttttatt ataaatatat aaagaatgat gtaataggcc 56880 agccatggtg gctcatccct gtaattccag gtctttggga ggctgaggca ggtgaatcac 56940 57000 ttgaggttag gagtttgaga ccagcctggc caacatggtg aaaccccgtc tctactaaaa

atataaaaat tagccaggtg tggtggtacg cacctgtagt ctcagctact ccggaggctg 57060 aggcaggaga atcgcttgaa accagaagcc ggaggttgca gtgggtcaag atcaagcaac 57120 tgcactccag cctaggtgac agagcgagac tttgtctcag gaaaaaaaa aaattctcag 57180 tcacctagat tgagaaatag aacattacca aaacagataa agccccactg tgttcccatc 57240 cacatcacat tcactttatc tcctcaaaag gaaagtgcta ttttgaattt agtattaatt 57300 atttccttgc atttcttcct actcatatca tgtgcctata tacatataat atatacaaat 57360 geogatatea tacatageaa tgttttaeat ttegattttt geattgteaa tgtagaattt 57420 ttaaacttaa aaacatgett catacageeg ggtgtggtgg etcatgeetg taateecage 57480 attttgggag gccaaggcag gcggatcgac gaggtcagga gttcgagacc agcctgacca 57540 57600 acatggtgaa accccatctc tattaaaaat acaaaaaaaa atattagctg gtcatggtgg cgcgtgcctg taatcccagc tactcaggag gctgaggcag gagaattgtt tgaacccagg 57660 aggcagaggt tgcagtgagc cgagatcgca ccattgcact ccagcctggg tgacagagcg 57720 agactccatc tcaaaaaaaa aaaaaaaaag cttcatacaa acatgaaacg ggcacatgtc 57780 tggctgggtg cggtggctca tgcctgtaat cccagcactt tgggaggcca aggcgggcaa 57840 57900 tcacttaagg ccaggagttc gagaccagcc tggtcagcat ggtgaaaccc cgtctctact aaaactacaa aaattagcca ggcatggtgg catgcgcctg tagtcccagc tactcgggag 57960 gctgaggcac aagtatcact tgatcccagg aagcagaggt tgcagtgagc caagattgtg 58020 tcactgcact cctgcctggg taacagagtg atactctgtc tcaaacaaac aaacaaaaaa 58080 aacaaagaaa agaaaaagaa aaaagaaatg ggcacatgtc aaatgttaat ttgactatgt 58140 aacttattaa tgaaggaacc agcagggtgt tagagctggg tcaaagaagt ataagagaga 58200 ctggagtgct tacagtcaag cagagacaga atgctgaaag gttatgaaat tagatatgtt 58260 agttaatatt cgaaagggca actaaactgt aaatcttgcc attatctttt ctatcagacc 58320 aaaataattt acatctctac tagacaaaca tttgccactt ttcaatccat aatctatggg 58380 taatttcatg gagtctggcc ctaatcaaca gtaaatagta aagccaacaa aggatctctt 58440 ccctagacct tgaagtgatc tttgggtgga ccccttagac aataatttag tatgacattg 58500 agaggacacg caagcctggg cagcatagtg agacccgcct ctacaaaaaa attaaaaatt 58560 agccgggcat ggtggtgtga gcctgtagtc ctagctactc aggaggctaa ggtggaaata 58620 ccacttgagc ccgggagttc gaggctgtag tgagctatga tcatgccatt gcactccagc 58680 ctgggtaaca gagcgagaac ctgtcttgaa aaaaaagaaa agaaaaaaga aaaagaaaca 58740 aaaggaaatg cagccatttt ttttttgcct tatttccaag ttctggataa tttttctttt 58800 ttaacaatat aaatattatc acttatgtat tettttgeaa tatggetttt cactcagtgt 58860 58920 agtttgcaag gggttagcca tgtgaatgca tgctgctcta gttcattaat tcactgttgt atgttggtct atgtaggcat atcacaatwt atycattccc tagctgaagt acatttgctt 58980 tcaaggtatt gctattataa acaaatctca tacctttaat caaataataa ttttgtctct 59040 tcaatcagct ntgatttact ttgttcnaan acnaagcaca caactataat tanaatttca 59100 ttactgataa atataaaata ttttccaaaa catcacaaat cttttntnnt ncactattta 59160 ctatacactt tnggtctnaa tttaaagcgg cttcactata tgtggttctt ttcctctct 59220 59280 cccatactaa ttactggtac tggacatata catccaaaat caaatagtar tgtccttttt aagggataaa tgggatgtga tgtagaaggg gcatagtagg gacttcatct gttttggcaa 59340 attttttctt aatataggtg gtaggcatgt ggaatttata acaaaagttc tgtctccagc 59400 ccagtttctg ttacataaaa ccatataatt aacagttaaa ctggatctgg tttgacacag 59460 59520 atgtagacga tattaataat tactccagaa caacaggcat aactaaaaac taccacaggc aaaaggggaa aatagagaat gtaagggctg ggacttaagc ccatgttgcc cacctccaag 59580 tttcatggac tttttccttc tccacattac tttcttctct gctagactgt cctgatgtac 59640 ctgctctgca cacagaatta gacgaggcga tcaggttggt caatgtatcc aatcagcagt 59700 59760 atggccagat tctccagatg acccggaagc acttggagga caccgcctat ctggtggaga agatgagagg gcaatttggc tgggtgtctg aactggcaaa ccaggcccca gaaacagaga 59820 tcatctttaa ttcaatacag gtaaaggaga gacccaagag cagatacgga aatgacacgt 59880 gcatacettg atttcactgt taatttactt atgaattgtg tetgaatttg aaaacaaget 59940 60000 gtaggaggta ttcatatttc cattgtgatt gccttcaggc tgacttgatt taacgtagtt catggtcttt agaaaacaag aaagtccata aagaaaatca atttaaaaca caaaatactt 60060 tctaatctag aaatggctat ttctgcttag agttataggg ctataactga tagaggtaac 60120 cttgaagaaa tatggccaat gtaggtttta ggagagaaga cttacaaata aagcaatttg 60180 agttcaaaat ttgactctga aacttaccag ctgagtaagc ttgggaaagt acctcaacca 60240 ttctaggcct cagtgttcca cctgtaaaat ggtaacaatc atagctatct taacgtgtac 60300 acctataaag tgattagtat agatttetta tacaaaacaa gagetetgta aattataget 60360 cttattagtt gctgacacaa taaagccact gagttatctt gagaattaaa catttatatg 60420

60480 ttactcgtca cataaaaata cattgccagc tgggcgcagt ggcttatgcc tgtaatccca gcactttggg aggctgaggt gggtggatca cttgaggtca ggagtttgag accagcctgg 60540 60600 ctaatgtggc gaaaccccgt ctctaccaaa aacataaaaa attagccaag tgtgatggca 60660 cacacttgta atcccagcta ctcaggaggc tgaggcagga gaatcacttg aacccggaag gcagaggttg cagtgagctg agatcgtgcc actgcactcc agcctgggcg acagaaggag 60720 actctgtctc aaaaaaaaca aaaataaara catattgcca tcttaaattc cacctatacc 60780 atgactccca gattcagtca ataacttttt gcataacatg caagtgactt ttcttcctaa 60840 gacatecece etecaacaca cacacattae ettaatetae aaatgegeea ggetagtgat 60900 tectgatgag getggttttg agggtteeca aaaagaettg gatacaaaaa ttaetgggea 60960 gagcaattga agatgcaata ttctgtgtgt agtatgttag gttatgttgg tgccctatcc 61020 agatecetgg ggatecettt taccagetee caetggtget ggtgetgetg etaactgett 61080 atctctgaaa ctttctccca aagattgccc ttggagcact tatgccccag agcttcctgc 61140 aggatcaggc tgaggctaac agtcatctga agccatatcc ttgcttagct tctttcactt 61200 ctctagtttg ctttcctcat ccccttaaaa gttgcacctg agagcattct ttataaacca 61260 cttctgtcag aatctcaggc actgcttcta ggaaattaga cttatggcat tctataatcc 61320 61380 agcatttccc tctttttca aactacaaag ctgtggatca tgcctgattt gagaaataag tttagaaagt cacagcaagc tcattaaaaa acaaaattaa aaaccataca aaaaatagaa 61440 taggacaaag tagaaaatat tagcatgcat tgcatttcat aagtcatatg cacatcatgg 61500 aatttcattt ccattttgta tgtgtatatg tgtgtaaaca tatatacaca tatgtagaca 61560 tacgtgtgtg ttttgaatca tgatgtcaag tgtattcatt actgcagacc acagtcaaag 61620 ggttttgaaa gccactgttc caatccctgc cagctctctg attctataac tctattagat 61680 tacacttgag gaaggtaaaa taattcaata tatttgatca tcctcgcata tatagacttt 61740 tagtttaacg aggaaaaagt cttgtattga agaataaaac ttgaagaaaa attttagcag 61800 tgctttcaac ctttagaaat ctacagtcaa tatttagttg tttttaccat tgtcagtatt 61860 ttctattctg tgctttgatt tacttccatt ctagtgtctc ttgagtaaca taacagattt 61920. atctaaaatt ctttatgctg ataacaaagg cacttctata taaaaacctc cacataaaat 61980 aaaattatgg ttttcaatta tacattttta taacaattat taccacttaa gagcatttac 62040 tgggtgtcag gcaatgttct aagacttttt ccatatatca gatcatttaa taccctcaat 62100 gaccctataa gggaagtaga attctttccc cagtttttca aatgaggcac agaggaggtt 62160 aagcaacttg totgagotca cacagotagt aaatggtaga actagaatto aaactcaago 62220 agtatttctc tagaatcagt gaacgtaacc actttgctaa actgcctgtg aagttacttt 62280 teteaaaaca geteetattt caccatgtaa agaaaagtae aaacccataa aatagcaagt 62340 gctgaagaga agccttatga aagaaatata caaattccag caagtgaaaa cggttgtggt 62400 ccctggttgt ataatagtta catgggtgtt gactttacaa ttatttaaac caaacataaa 62460 tactttatgc agtttttatg tatgttatac tcacagaaag agaagggaaa aatttttaaa 62520 62580 tcattctctt aaggttacat caagttgcgt atcagttcag ttccatttaa atgattcaaa tcaaagtctg tgcatttgag aattcattaa gagagtaaca tacatgttat tcattaagag 62640 taacataaat tttgcattga ttcttgccaa aatcacacct acaaccataa attgtaaatt 62700 tctaggaaaa ctcagtacaa aacttggtgc aatgcaataa agtttgtggc acagacagta 62760 62820 atactcagca aacatcccac ctcctctctc atattttcca gctccccttg tggttaaacg ttgccatgtg gcaagttctg gccagtgaag cgtgagcaaa actgaaaagg gttctttgta 62880 gattgagaca gtgaagagcc tatgtgtgct catctattct ctttttctgc tgagggcaca 62940 aagaaagtcc tgaaatcatg tgctacagct atgagataat gtgcctttgc ctaccaggct 63000 63060 tctcagtgtt tactggtgtg gagcccttgt aatggacaca taacatgaac aagaaataaa 63120 tetttgttgc atgaageeet aggaatgeea ggaetaatet gttaeeteag cacaaaceea ggcctatcct gactaaggtg gtattaaatt actattgaat gtgtattggg atttagtaaa 63180 cttctactgt ataatccttc ttctgtaggt agttccaagg attcatgaag gaaatatttc 63240 63300 caaacaagat gaaacaatga tgacagactt aagcattctg ccttcctcta atttcacact caagateeet ettgaagaaa gtgetgagag ttetaaette attggetaeg tagtggeaaa 63360 agctctacag cattttaagg aacattttaa aacctggtaa gcagagtgcc tggttaggaa 63420 tgccttgttg acaggaatag ttaattctca aaagggaaaa acaaaacttg tttcaaaata 63480 cctggaaaac atgtttaacc tcattaataa agacatgaaa acaaacaaga tggcattttc 63540 63600 tgcctatcag atttgcaaat taaaaaaaaa cccaggaaat cctgatagga atgtgatgaa atgggaattc tcatatatca tgtattggtg ggaacataat tggttttgca tttttgaaag 63660 ctatttgatt atgcatatga agagccataa aatttccttt tgatataata attccacttc 63720 cgaaatcaat cctaaggrat aaatctaaat ttgatgaama ktctccctcc aagatctaga 63780 tttgcagcat tatttaaata ttaaaagttg gccgggcgca gtggctcatg cctgtaatcc 63840 cagcactttg ggaggctgag gcgggcggat cacgaggtca ggagattgag accatcctgg 63900 63960 ataacacgga gaaactgcgt ctctactaaa ataaaaaaaa ttagccgggc atggtggcgg gcgcctgtag tcccagctac tcgggaggct gaggcaggag aatggcgtga acccgggagg 64020 64080 cagarcttgc agtgagcaga gatcgcgcca ctgcactcca gcctgggcga cagagcaaga ctctgtttaa aaaaaaaaa aaaaaaaaa atatatata atatatat atatatatat 64140 64200 atatatatat atgttaaaca tactcttaat gtgtaaaaac aagagaatga ttaagtakat tatgactaaa tacactcaat acattttatg aaacgttaaa aatattcaaa aaatttaaat 64260 aatgacttgc taactacttt aacaagagct ttattatcag ctagtcttgg aggtaatagt 64320 64380 attatcatga tttttcagaa aaagatcctg aggctcagtg tccaaggtcc aatgaactac tcaggtcgga ggtggtagag cagcatgtgg agccagttct ctctccgact ccatcatcac 64440 64500 actgcacggc ttcctgttaa gatatttgct caaaaaatgc gagatataaa aatctgggta 64560 atatgatcaa ccttaaagaa taattacatt ttaaattatt catgagacct tgttagtagg 64620 tcaccatcaa tgtgtaatta agccagatgt gacaggattt gttgcctctc cctttacttc tgaattttgg aggccttttt ttttttctag ttgtatcagt cagccaacca atatcttttt 64680 agcatctact aagtttagat acgggaactg gtactctgaa agagaaaatg agaaatttga 64740 caagateetg teeccaagga getteetate caacagggge acaagacaga tagatagaca 64800 cacacacaca cacacacaca cacacacaca cacacacaca ctataaagca aggcaagatt 64860 tagagagtgc acaggagtgg gctctgggag ttcaggggag ggtcgttcac attctggtag 64920 ggaagatact tetgagetea gtatatteee ttteteaetg teettetate eeetetette 64980 65040 teetttttte tttettett ttttttttg agacagagte ttgttetgte acceatactg 65100 65160 gagtacagtg gcacgatete ggeteactge aaceteggee teecaggtte aaatgattet 65220 tgtgcctcag cctcctgagt agctgggatt acaggcgcac accaccatgc ctggctaatt 65280 tttgtgtttt ttagtagaga cagggtttca ccatgttggc caggctggtc ttgaactcct gacctcaagt aatccaccca ccttggcctc ccaaagtgct gggatcacag gcatgagcca 65340 65400 ccacactggc ctcctctccc tttcttaaaa atacatcaat taattaaata tataaatgta gatacacaca caggcagaat caaagtgtat aggttggaga ggagactgtt ccaaaagggg 65460 65520 ggatggcatg ggcaaatacg gcaagaaaga gtagagcatc taggtactga gggtgctggg aagtcctgct aaaaatacgg caagaaagag tagagcatct aggtactgag ggtgctggga 65580 65640 agtcctgcta aagtggtccc ctcccactgt ggggcctttg agtttccctg tgccagggta 65700 aaaagaaatg gatggatacc gactcatgag tcagagggga agctggacgt ctatgcccag 65760 agccaggcag aaacgggtca ggtctagagt ctgggaggag gaaaccgatg gacagctgct 65820 65880 tcagggccca gcgctcaggg tgaagcagct gcagttgttt ttagtcctca gatcactctg 65940 ctcaagatgt gacttgccag gaggaatctg gctggcccag ctgggacatg tgtgtctacc tctagaccag gagagaggag agtcttggtt gacagtcccc atgtagtacc cctttgttta 66000 ggttactgag tcatcaacag atctcagttc aaatagtcac ttcttcaggg gcaatatacc 66060 66120 ctcttctacc cataaactag gggcaacata ccctctctcc cctttcacac atgaccataa 66180 caccatgtag cactcaactc ttgtaagttg acatttaccc atgtgactct ttatgaacgt tcatctccat cccgagacct acagtccatg agggtaccac cgttctaggg tttttgctct 66240 66300 tctctttgtc agtggggact taggactctg cctggcacag ggcaaaccct caatatttgt tgaataaatt aattaataaa cacgtgtaaa tgaatatcag tagactacaa caagagtaac 66360 66420 agtaggcgaa ggtggaaggc aaaggtggga agaggtcagg gctctgagtg ctgggctgtg gagtctgagg ttcactctac agcgctggtg agacacgata ggttttagag aaaggaagcc 66480 tcatgctggt gccccagtgg gtactgacta tgcatttgta gccaaatcaa agtatttccc 66540 66600 ataaagtcat ctatctcttc ccagttgttg ggacttccaa tggcaatggg aattaagata 66660 ctgagtaatt gggagatcaa gcaaattatt tactaacaag gcacacgaag tgatttttca caggcaatgt taatgttttt cttttttatg tagttttaaa attctaaaag taacaaaatc 66720 acaactacca aacatttaga cgacaaaaat tatccataat cccaccatct taacacaacc 66780 actattatca tttgttttcc ttattcacat tttctaccta ttttcttaga ttyccaagaa 66840 atagaattac ttgtttagag gttattaaca tcttattgtt ctggatatat atatatat 66900 66960 agctatatat agctaaattt aataacagca atgtctgcag taccactttc tcaaatgcta 67020 actggcattt caattttttg agacagtctc tctctgttgc ccaggcagga ttgcagtggc 67080 atgatetegg eteaeggeaa eeteeaeete eeaggtteaa gegaetetea tgeeteagee tcccaagtag ctgggattac aggtgtgcac caccacactt ggctaatttt tgtattttt 67140 agtagagatg tgtttttacc atgttggccg ggctggtctc aaactcctgg cctcaagtga 67200 67260 teetteeace teageeteee caagggetgg tattacagge atgageeact geetggeetg

					+~++~+~	67320
		ttcagtaata				
		atgagaataa				67380
		ttggtatcat				67440
		aacctgccaa				67500
		agaatcaccc				67560
		acagctcact				67620
		tctggaactt				67680
ggacgttcct	gattggtttg	caatgtgttt	tatttcccat	ccccaagttt	catagctgcc	67740
		caggctgtaa				67800
taagcttttg	tagatgggct	cttaccatca	tcatcatcgt	gaaaggcaaa	tatacaaaat	67860
ttgttgacta	atgtaatgag	tcatgagtaa	cagaagttta	ctgaccaaac	actacgtgca	67920
		ctttattatc				67980
		gacgatttct				68040
		acacagtacc				68100
		tactccaaga				68160
		ctttttttt				68220
		atctcttcat				68280
gataatgcaa	taaacacaqt	tgcaggaaag	tatgttagct	atatactatg	aagtactctt	68340
		cttagctatt				68400
		aatatgtatt				68460
		cacctaggtg				68520
		ttcttccttt				68580
		tctaagattc				68640
		ttgtggtaaa				68700
		gtggcattaa				68760
		ttttatcttc				68820
		ccccagcccg				68880
tgactactct	aggtactgca	tgtaggtgga	atcatacagt	atttgtcttt	tocttcattt	68940
		aagacagggt				69000
		ttgtgactgg				69060
		tctcagaact				69120
		cattcagcca				69180
		gttttgaacg				69240
		ttgacatacg				69300
		ttggaccttg				69360
		tacaatgaga				69420
		ggtgcctcac				69480
		acaggagttc				69540
		aaattggcca				69600
						69660
		gagaattgct				69720
		ccagcctggg				69780
		aaagaaacgt				69840
		gatctatctg				69900
		ataattaact				69960
		agaattatgt				70020
		gtggcatgat				
		agcctcctga				70080
		agtagagatg				70140
		tetgeeegee				70200
		gggaactaat				70260
		ccatagattt				70320
		attttctatc				70380
		gctcaaaaca				70440
		ggctactata				70500
		taaggtaatt				70560
		gttacccgag				70620
aaattccaga	aatacatagt	aagttttcaa	ttgcatgcca	ttaaatctca	tgctgtccct	70680

```
gaccccttcc tctccggagg tgaatgctcc ctttgtccag tggctccacg atgactacat
                                                                     70740
tececaaatt gttetettag gaaceettte tgtgtteaag gaaceettae tttaettaat
                                                                     70800
tatggcccca aagcacaaga tagggatgcc ggcatactgt tataattgtt ctattttatt
                                                                     70860
attagttatt gttgttcatc tctacctgtg actaatttat gaattcaact ttatcatagg
                                                                     70920
                                                                     70980
tatgtaggta taggaaaaaa acatggtatg tataaggttc agtactatct gcagtttcag
acatcccctt ggggtcttgg aacatatccc ccgtggataa sgggaaacta ctgtaaaagt
                                                                     71040
ttgtstttta tagagtagtt stsagaacta cattaatcca taatgtgtgs ctcatgatac
                                                                     71100
                                                                     71160
tcattgatag atggtagtag caacaataaa aaataatatt atcaagtaac tgattcataa
ttgactctca aaaacgttaa ttttctgctt tcctttacct aagtttacct acatgtttga
                                                                     71220
atttgtaaag ggaaggtttt tctagaccaa taattttcaa atatttttgc tctcatactt
                                                                     71280
cctcaaagga aactgaaaaa gttgcaacat acttgcatgt catttttcta tataagttga
                                                                     71340
aagaatagca aattgttatt ttcccacgca tcgtaaagat tagcaggtca tccctcttta
                                                                     71400
aaatgtacca aatggaatct aaatatcatc gcaatttgac ccagcatcat ccatttaaac
                                                                     71460
aaatatacaa gtttttcttt aacaatgaga aattttatct cattacattt tctccctaaa
                                                                     71520
ctcttatttc aatctacatt cctaagaatt ttatcctaat gtagtatatt tttatgctta
                                                                     71580
aatatctttt gttgatcaac acaattttga tcatttttaa attttaaaaa ttaagaacat
                                                                     71640
                                                                     71700
cctgtgacat caaattctag gtatgaaata tttattctag attgggtgat cattataatt
attttttgta cataattgat caaaataaca taaatatact acaaatttct atgactacta
                                                                     71760
                                                                     71820
aacatataaa agtaaaattt taaacaaata tatctcttaa tgagaaggaa gagcttttta
tactccaata agttaacgta tccactaata attattattt cttcctagaa caagacagga
                                                                     71880
ttaagcatca tgaccgtccc tattggggga tgtttttata gatgcaagca ctgtggcacc
                                                                     71940
                                                                     72000
tactggtata aatgcacctg ctgattggaa tgttctttcc ccagatcttc ccctgctggt
ttcttcccag tattcaggtc tcagctcaaa tgtgacttcc tcaatgaggc ctcctggtga
                                                                     72060
tcagatctaa agcaccctct acacaatcac tgtttagtgc tatacccatt aatttactat
                                                                     72120
catcacactt gtcactatct gcagatgtct tgtttggtta cttttgtngt gtttgtcact
                                                                     72180
gccagaatat cagttctatg aagaaaaggg ccttgtctat tttgacactt ataganatga
                                                                     72240
tgnaggnacg acatacaaat ggccaatggg catatggaaa aacgcttgac ttcaagagta
                                                                     72300
                                                                     72360
ctnatggnta tnaccaacat ttatggagta actactttga aaagaaccat tctgtcttta
ctatcaagcc aagatactca aggaaggcag cagaagtgga agctccatgt gggcagagga
                                                                     72420
                                                                     72480
gcctagtctt gagatgtgat ttagctggta tttgggtgaa acaaataaac cagcctcaaa
                                                                     72540
ataacacaag gggccgggtg cagtggctca cgcctgtatc ccagcacttt gggaggctcg
aggcaggcag attacttcag gtgaggagtt cgagaccagc ctggctaaca tggtgaacct
                                                                     72600
                                                                     72604
ccat
<210> 8
<211> 17
<212> DNA
<213> Artificial Sequence
<220>
<223> Primer
<400> 8
                                                                        17
cggggttggt ttccacc
<210> 9
<211> 19
<212> DNA
<213> Artificial Sequence
<220>
<223> Primer
<400> 9
                                                                        19
gcgaggagag aaatctggg
```

<210> 10

<211> 22 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 10 tgctcactac tttgcagtgt tc	22
<210> 11 <211> 22 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 11 tgagatcgtg tcactgcatt ct	22
<210> 12 <211> 27 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 12 gtaaatctca aaatgttggg ttaatag	27
<210> 13 <211> 24 <212> DNA <213> Artificial Sequence	
<220> <223> Primer .	
<400> 13 ctaactcttc ttctatcatt actc	24
<210> 14 <211> 22 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 14 tgtttattgt gtgtctgctg tg	22
<210> 15 <211> 21 <212> DNA	

<213> Artificial Sequence	
<220> <223> Primer	
<400> 15 gaacaaccaa catgcaaaca g	21
<210> 16 <211> 22 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 16 cccaggtgtt ttcaattgat gc	22
<210> 17 <211> 22 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 17 agcagttttg tccttccaag tg	22
<210> 18 <211> 25 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 18 gtgttttgta atctgatcag atctc	25
<210> 19 <211> 21 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 19 gcagtatttc tggtccagat c	21
<210> 20 <211> 23 <212> DNA <213> Artificial Sequence	

<220> <223> Primer	
<400> 20 ggtgcacata gatcatgaaa tgg	23
<210> 21 <211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 21 taagctgaaa taggtgcctt aag	23
<210> 22 <211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 22 tttattccat ttctgtcccc tac	23
<210> 23 <211> 22 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 23 aaggctcagt taggtctgta tc	22
<210> 24 <211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 24 caggagtttt aacgtcttca gac	23
<210> 25 <211> 23 <212> DNA <213> Artificial Sequence	
<220>	

<400> 25 gactcagaaa tgtctaccat ttc	23
<210> 26 <211> 22 <212> DNA	
<213> Artificial Sequence	
<220> <223> Primer	
<400> 26 tgtctccact tcttcaaagt gc	22
<210> 27 <211> 24	
<211> 24 <212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 27	
caaaatgtac ctgagaactt aaag	24
<210> 28	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 28	
cacctccaag tttcatggac	20
<210> 29	
<211> 22	
<212> DNA	•
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 29	
caaggtatgc acgtgtcatt tc	22
<210> 30	
<211> 25	•
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
-400> 30	

gaatgtgtat tgggatttag taaac	25
<210> 31 <211> 25 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 31 ttgagaatta actattcctg tcaac	25
<210> 32 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 32 ccatcctgga cttttactcc	20
<210> 33 <211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> Primer	
<400> 33 ctttcctgca actgtgttta ttg	23